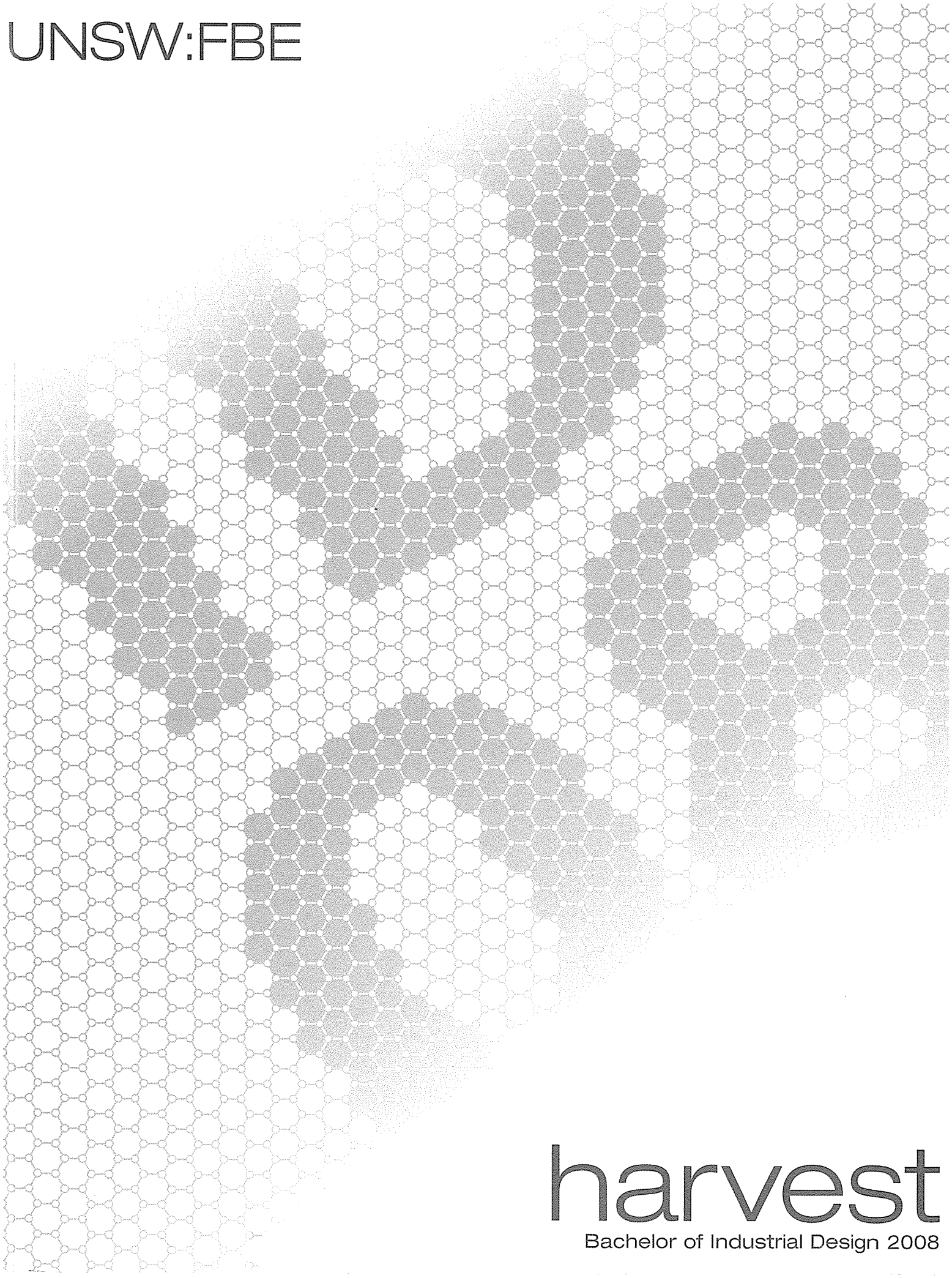
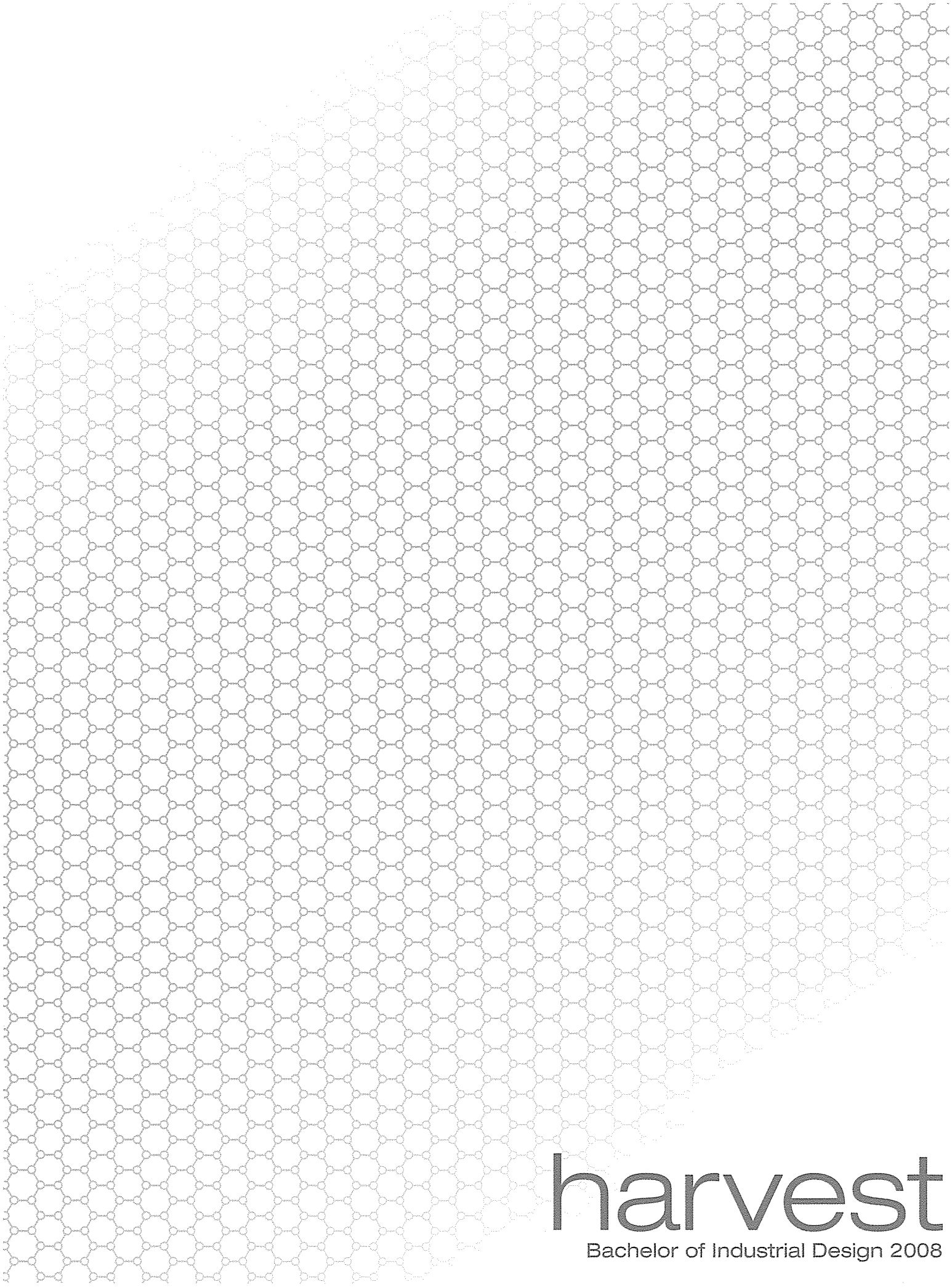
UNSW:FBE



harvest

Bachelor of Industrial Design 2008



harvest

Bachelor of Industrial Design 2008

FOREWORD

At this time of the year we are reminded, as university teachers and administrators, of what we are here for. We exist to provide the best possible preparation for our students to embark on their professional lives. Every year I am delighted to see the inspiring results of the work that comes from the creativity, skills, scholarship and hard work of our students. Qualities that are fostered by the commitment of my skilful and hardworking colleagues: the full-time members of the university and our large and invaluable workforce of sessional staff.

The Faculty of the Built Environment is an exciting place to be. We prepare people to work in one of the great human endeavours of the age: the design, construction and management of cities. The building of cities that work well for people and businesses, that are efficient, comfortable and inspiring, has of course been a challenge for humankind for thousands of years. But in today's world of mega-cities, driven by prodigious rates of economic growth in countries like China and India, and in many other parts of the world, the challenge of city building has never been greater. Our graduates, collectively in their professional lives, will be responsible for the design, development and construction of buildings and their interiors, the household and industrial objects that they contain, the parks and small urban spaces, and the neighbourhoods and districts that make up entire metropolitan regions. Our graduates will work independently in their own professional fields but invariably in teams and settings that require cross-disciplinary insight and working relationships. Never has planet earth and its inhabitants required these professional skills more. Our students could have had no better preparation for their life work than what they have had at UNSW. I am very proud of their work and look forward to seeing them do great and worthy things in the future.

Talking about the future, this will be my last foreword to the graduand catalogues. After nearly seven years as Faculty Dean I have completed my contract and have stepped down. Professor Alec Tzannes, whose Afterword follows, has taken up the reins. His appointment is inspired and inspiring for the Faculty, the wider University and the built environment professions. I look forward to observing, from the sidelines, his new ideas and creative energy at play in driving the Faculty in new and exciting directions.

Peter Murphy
Professor of Planning and Urban Development

AFTERWORD

I have now been in my role at the FBE for about 4 days and can report an excellent induction process led by Peter Murphy. Before coming here Peter gave me a clear overview of the education and research going on across all the disciplines. He enthused me with the prospect of making a contribution to what I think already is a place most able to meet the emerging challenges the world faces in the design, construction and management of the built environment.

I look forward to our work in the next twelve months, as I'm confident that issues to do with sustainability in the built environment and the future of cites, health management and design at every level, will be the focus of significant public debate – areas of strength and significant activity in our faculty.

The FBE arguably provides the most relevant framework to make a valuable contribution to our future built culture and infrastructure. Being here and working together to help meet the challenges facing the built environment, I understand as both a privilege and a responsibility. I look forward to the year ahead at the FBE with enthusiasm and great interest.

Professor Alec Tzannes
Dean, Faculty of the Built Environment

CATALOGUE INTRODUCTION

This year, we have had a wonderful group of final year students pursuing a diverse range of projects. It has been very exciting to witness the development of the students as they have been exploring new ideas and solutions for products and systems covering a wide range of human activities. The students, whose major projects and portfolio entries appear in this catalogue and in the Graduation Exhibition, have completed a unique program that integrates industrial design with marketing, science and engineering, manufacturing and business planning; within 4 years of undergraduate studies at UNSW.

The designs displayed are all supported by thorough research into socio-cultural issues, marketing requirements, specific target markets, ergonomics, state-of-the-art technology, materials and production processes. The design work has included in depth exploration of possibilities, extensive concept developments, evaluation and testing, detail resolution and development, production planning and business evaluation. These designs showcase the creativity, the innovativeness, the knowledge, and the diverse range of skills of these talented young designers, as well as their professional readiness.

All of this would have been impossible to achieve without the contribution of the Industrial Design Staff members and all our treasured industry relations teaching in the Program, and I would like to take the opportunity here to thank all of them for their generosity and enthusiasm.

On behalf of all the Industrial Design Staff teaching at UNSW, I would like to congratulate the graduates on successfully completing the Program and particularly on their achievements in successfully completing their final projects and staging the exhibition. I wish them well in their future career and will look forward to their future success stories and to the fine contributions they are sure to make in their chosen field of endeavour.

Assoc Prof Dr Oya Demirbilek

Program Head, Industrial Design

MAJOR PROJECT 2008

01. ANDREW BEZZINA
UMIX
CORDLESS BLENDER

02. JOSH BLADWELL
EVE
INTERACTIVE POWER MONITOR

03. EUGENE CHEONG
MAESTRO
LASER GUIDED MUSICOLOGY

04. NICHOLAS CHEUNG
MRF
MODULAR RESCUE FRAME

05. DAN CONNEL
BLACK DIAMOND
MOUNTAIN BIKE TRANSMISSION

06. ANTON GRIMES
LINK
URBAN SCOOTER SYSTEM

07. ROY HAREGUNA
SQUAD
FIREFIGHTER POSITIONING SYSTEM

08. GRANT HUMPHREYS
MAIRINE
SAFETY WETSUIT

09. MIN KONG
GENIE
INTUITIVE NOTEBOOK

10. JAMES KWONG
SPEAR
SPORTS DIAGNOSTICS SYSTEM

11. JASON LAM
SOLAQUA
WATER SOLAR STERILISATION

12. ANGELINE MELOCHE
CELSIUS
MODULAR REFRIGERATOR

13. STANLEY RAGUINE
OFFICE POD
DEMOUNTABLE BUSINESS BOOTH

14. KENNETH SEETO
SONICTEK ATLANTIS
UNDERWATER BUDDY TRACKER

15. XINNIA SUTANTO
HYDROLIFE
RAINWATER HARVESTING SYSTEM

16. SILVANI TANLIANG
EAT RITE
FOOD INGREDIENTS SCANNER

17. SIMMON TAYLOR
SIDE-KICK
SWING ANALYSIS SYSTEM

18. LEO WAN
SKRATCH
PORTABLE MP3 DJ SYSTEM

19. JAMES WANSEY
UGO
STROLLER SAFETY BRAKE

20. KIMBERLY WONG
CUB
TOURIST INFORMATION KIOSK

PROJECT HISTORY 2008

21. HINSON CHAN
PROJECT HISTORY

22. JESSICA CHEE
PROJECT HISTORY

23. MICHAEL DIOLASO
PROJECT HISTORY

24. XIAOXI SISI JU
PROJECT HISTORY

25. JULIA KIM
PROJECT HISTORY

26. RENE LAM
PROJECT HISTORY

27. LEE GA YOUNG
PROJECT HISTORY

28. PAUL SARPI
PROJECT HISTORY

29. JUSTINE SMITH
PROJECT HISTORY

30. STACEY YAU
PROJECT HISTORY

MAJOR PROJECT 2008

The final-year Selective Elective Project course allows students to demonstrate their encompassing understanding of the product development process. This major design exercise is normally an application of the research findings undertaken in the first semester of 2007.

In this course, students attempt to explore the optimum solution to problems identified in the research, using various iterative techniques for concepts generation, testing and development until the design is finally resolved.

The outcomes of Industrial Design Project are resolved design proposals which demonstrate each student's understanding of the product development process. Students are required to explore the optimum solution to problems identified in their research activities. Various iterative techniques are used for concept generation, testing and development in order to produce and communicate proposals for highly resolved industrial design solutions.

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"Design is the conscious and intuitive effort to impose meaningful order."

Victor Papanek

01.

ANDREW BEZZINA
UMIX
CORDLESS BLENDER

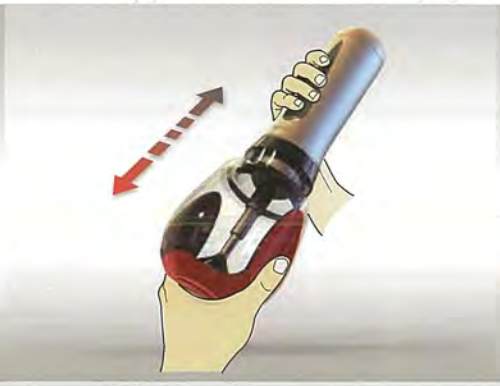
Australians love their backyards. It doesn't matter whether it's a small city courtyard, a couple of country acres, a secluded suburban sanctuary or a low-maintenance entertaining area, a great backyard reflects a particular lifestyle. In the last decade 'The backyard' has blossomed into a finely furnished outdoor living space, designed as an extension of the home. It is the ultimate expression of who we really are.

The UMIX Cordless Blender brings the best features and luxuries of indoor appliances to the emerging lifestyle trend of outdoor leisure, entertaining and cooking. This family of products aims to minimise the limitations of wired household products and bring the complexity of indoor cuisine to the refreshing outdoors, redefining the customary barbeque meal.

Utilising the newest in Lithium-ion polymer battery technology, UMIX houses a motor powerful enough to compete with any indoor kitchen appliance. The flexible blending sack is large enough to contain all the fruit, vegetables and other ingredients required to create various marinades, smoothies, cocktails and other condiments.

The blending sack replaces the need for any additional bowls or pouring containers. Multiple blending sacks can be added with different caps for pouring, drinking and squeezing. The UMIX Cordless Blender is robust enough to withstand the daily use of small inner-city apartments and can be easily transported, making it ideal for any outdoor occasion

The UMIX Blender features a retracting, telescopic blending pole for use within the blending sack and enhanced ergonomics



The support platform is designed to accommodate varying handling positions and comfort during use

Multiple blending sacks can be removed and sealed with various caps to suit different storage needs.

UMIX

PART	MATERIAL	DIMENSIONS	MANUFACTURING
Main body	Magnesium alloy	59 x 150	Microcasting
Telescopic pole	Stainless steel	151 x 49	Machined
Bottle	Dupont hytrel TPC-ET	169 x 95	Overmoulding
Base	Polypropylene	77 x 50	Injection moulding

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"design, at its heart, is about understanding the problem"

02.

JOSH BLADWELL
EVE
INTERACTIVE POWER MONITOR

In recent years, there has been significant growth in the awareness of the damage our energy use is causing our environment. Despite this, we have seen limited reductions in energy consumption, and an overall increase in some key areas.

Part of the problem, particularly with regards to residential use, involves a lack of understanding about the way power is consumed in the home, and a lack of direct control over our consumption.

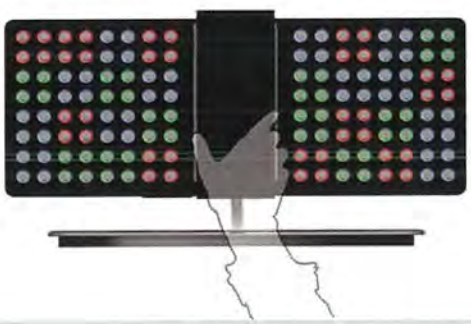
"Eve" seeks to redress some of these issues by allowing users to see a breakdown of their current energy use, and allowing them to shut down problematic areas.

The display uses both soft, emotive feedback, and hard data, to allow users to see which devices around the home are currently drawing power. It also stores information over time, permitting users to track the changes in their overall (and device specific) power use over time.

The product interface is deliberately interactive (requiring user participation to be effective) in order to draw users in and change their involvement with the problem from a passive to an active one. The materials utilised are designed to give the device the maximum possible life span.

The design of the device is intended to move away from the traditional eco-design cues, turning the product, and its message, into a lifestyle piece, creating a strong emotive connection and re-enforcing a sense of pride in changing one's behaviour.

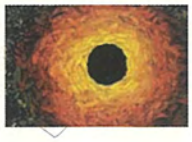
The product is intended to increase the interaction of households with measures to control energy usage.



Groups of four LEDs represent devices or areas around the home, and glow from green through red as power use increases.

To look at a high power using device the user simply slides the touch screen over the top of that LED group.





PART	MATERIAL	DIMENSIONS	MANUFACTURING
Rear casing	ABS	500 x 350 x 200	Compression Moulding
Stand	aluminium	(Incl. Stand)	Forging and Milling
Face	polycarbonate		Thermoforming
Sliding screen	glass		Extrusion

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"it is the purpose that defines the design"

03.

EUGENE CHEONG
MAESTRO
LASER GUIDED MUSICOLOGY

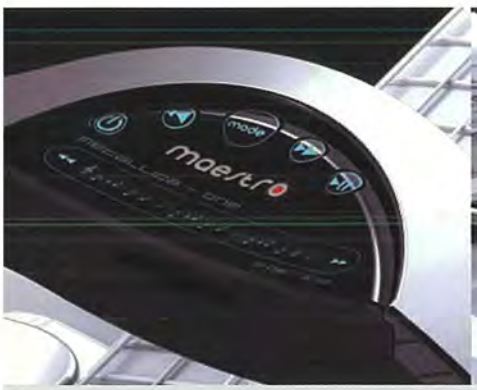
Maestro is a laser projected music learning aid that has been designed specifically for adult beginner guitarists with no music making experience. Music pedagogy for adults can be an extremely intimidating experience which breeds misconceptions that music is an elitist discipline.

Maestro is a new product typology that makes music pedagogy more accessible to adults who want to play an instrument but have no prior musical background. It provides beginner guitarists a holistic and hands-on approach to self-taught music pedagogy. This compact, versatile and intuitive tutoring unit also gives players the freedom of learning in their own time and space.

Technologically, Maestro converts the most common music files such as mp3s into guitar tablature notation. This information is then projected onto the guitar fretboard via lasers which help guide players through a robust curriculum of chords, scales and eventually compositions.

Mechanically, Maestro attaches to the main body of the guitar using a pair of pressure-locking suction cups located in the feet. The pressure-locks which are controlled by the clips on the main bridge allows for optimum suction capabilities.

Maestro is designed to complement the guitar both in function and also in form. The sweep of its highly organic curves matches any acoustic or solid-body electric guitar, whilst ergonomically it is also designed to unobtrusively cater for variably individual strumming techniques.



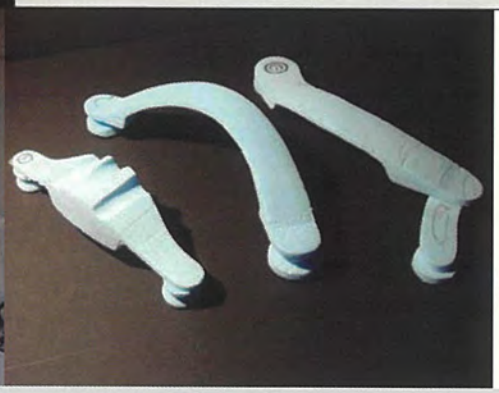
Concaved OLED screen allows for easy legibility and an intuitive information input area.

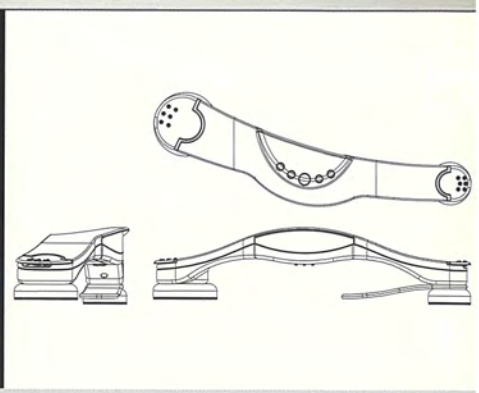
Pressure-locking suction cups attaches the device to any acoustic or solid-body electric guitar.

Large hood protects guitarists from looking directly at the laser projection modules.

maestro

Laser guided musicology





PART
Visor
Laser housing
Suction cups
OLED screen

MATERIAL
Acrylonitrile butadiene
Styrene
Magnesium alloy
Silicone

DIMENSIONS
223 x 55 x 58

MANUFACTURING
Injection moulding
Die casting
Double shot injection
Moudling

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"Think, draw, make"

04.

NICHOLAS CHEUNG
MRF
MODULAR RESCUE FRAME

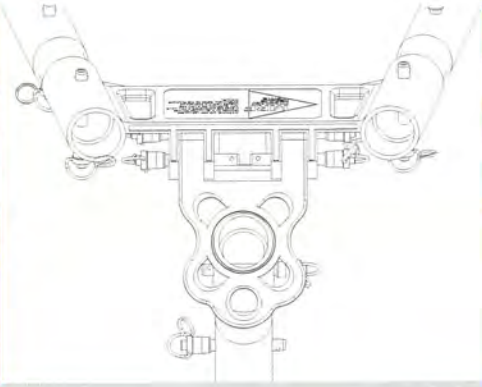
The Modular Rescue Frame is designed for the trained vertical rescue workers within the public service sector. The idea is developed around a system that adapts to a variety of different terrain in both natural and city environments. It aids in the operation of vertical rescue by artificially adding height and introducing vector forces that add mechanical advantage whilst hoisting a person to safety.

The multiple configurations allow the rescue operator to rig the frame into either a gin-pole, an A-frame, tripod, or a tetrahedron for much needed reach, management of lines, and the prevention of rope abrasion.

With the tripod configuration, the swivelling head allows for variable positioning of the working line. It can be lowered directly between the fixed legs or be 'pulled back' to position in the centre of the structure. The back legs can lean along a back obstacle for scenarios where minimal space is a factor.

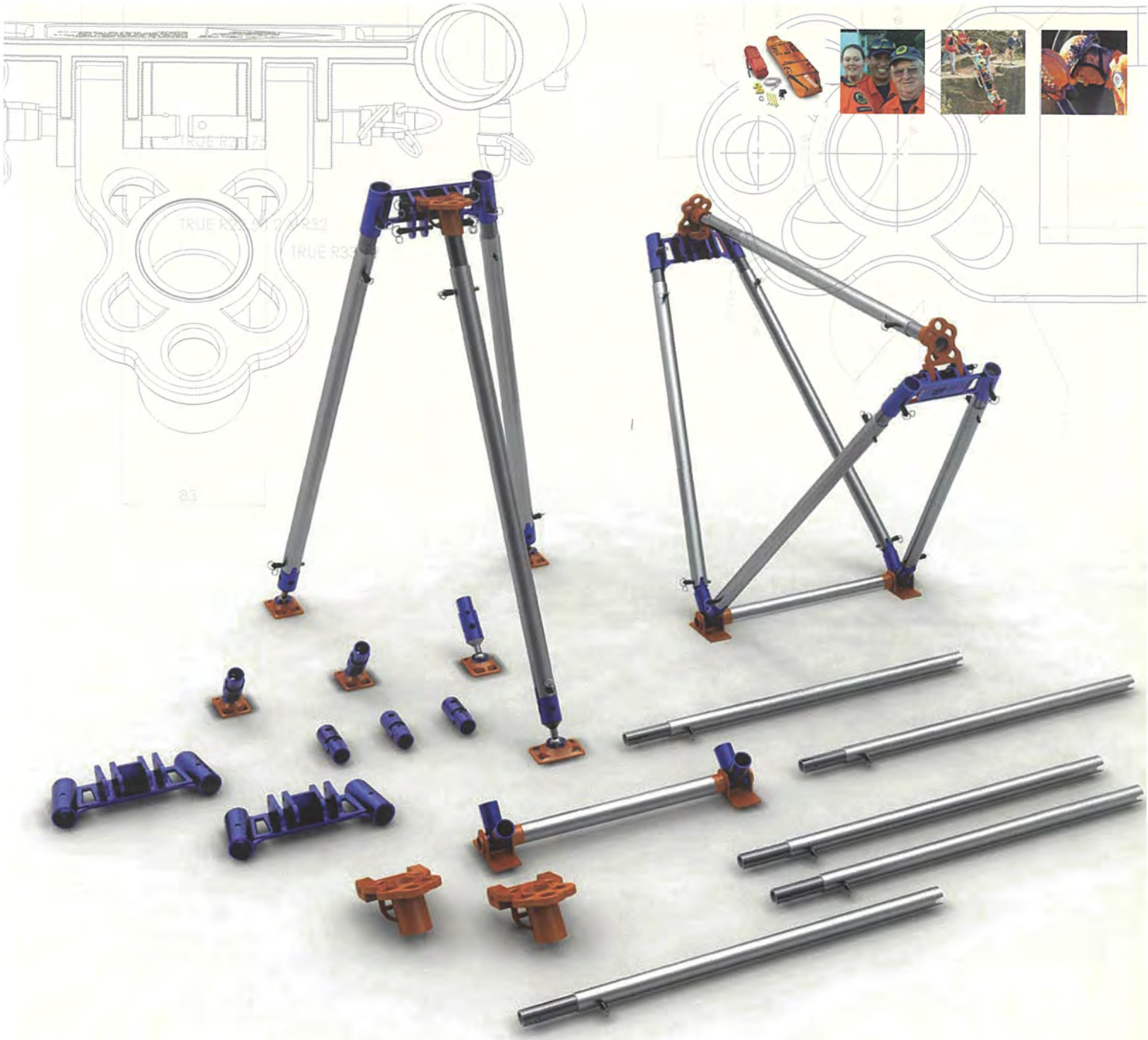
The tetrahedron configuration is used on relatively flat ground. It is rigged in a fashion so that the back counter guy line allows for maximum reach as it pivots over an edge to allow easy rope access. Once the victim is pulled within reach, the operator will pivot the structure back, positioning the rescued person into the centre of the frame. This makes the removal of ropes attached to the victim much easier than trying to do it in a vertical manner.

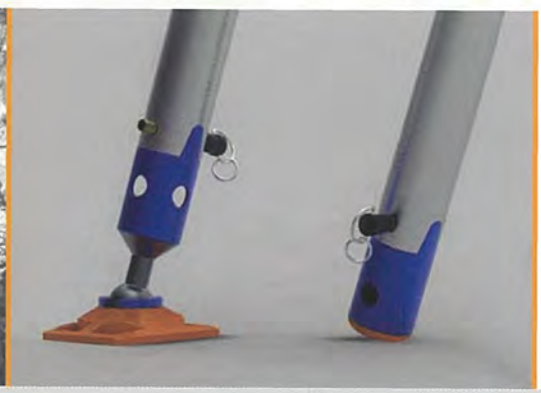
The tetrahedron configuration in action.

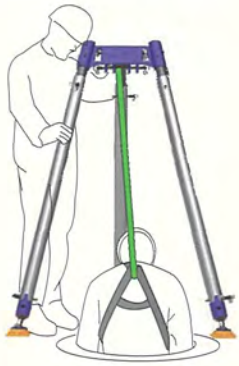


The much used A-frame is also incorporated into the system.

Break apart head that is the heart of the system.







PART

Telescopic tubes
Dovetail hinge
Quick release pins
Castings

MATERIAL

Aluminium
Steel

DIMENSIONS

1200 x 1200 x 1600

MANUFACTURING

Welding
Casting
Fabrication
Extrusion

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"You never actually reach a point in design where you can stop and say something is finished and be sure that it is. Design is never finished."

05.

DAN CONNELL
BLACK DIAMOND
MOUNTAIN BIKE TRANSMISSION

The Black Diamond mountain bike transmission is a gear shift system that replaces the rear gears and the rear derailleur on a mountain bike. The transmission mounts onto the rear hub and is actuated through the handlebar mounted shifter.

The rider pedals the bike and drives the transmission and a gear of selected ratio drives the rear wheel. The rider input ratio and the transmission output ratio depend on the selected shifter gear ratio and result in the bike being driven at various speeds.

The transmission covers all rear gear ratios, eliminates the need for a derailleur type gear shift system, is out of the way so not to hit or catch on rocks or sticks, is completely sealed to water and dirt, and features a continuously variable transmission.

The main benefits of the transmission lie in the continuously variable transmission gear change method. A continuously variable transmission is a gear shift system that does not have incremental gear ratios but rather a continuous movement through an infinite number of in between gear ratios allowing any gear ratio to be selected. The gear change can be done anytime and anywhere, even not pedalling stationary, to any gear ratio, unlike current gear shift systems where the rider needs to pedal the bike to change the gear.

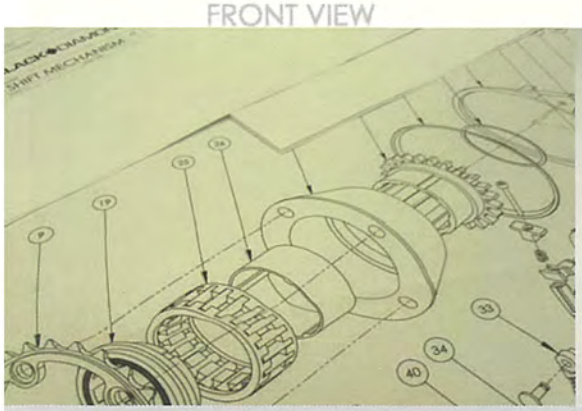
The transmission can be used on any mountain bike however the downhill/freeride/heavy all mountain categories would benefit the most. The transmission can be used in downhill mountain bike races where conditions are the most extreme and where fractions of a second saved are important.

The transmission is used on mountain bike as a substitute to current gear shift systems, to provide a gear shift solution.

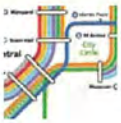
The transmission is out of the way so not to hit or catch on rocks or sticks and is completely sealed to water and dirt.

The transmission features a continuously variable transmission.

The transmission can be used by downhill/freeride/heavy all mountain riders/racers where conditions are the most extreme.



PART	MATERIAL	DIMENSIONS	MANUFACTURING
Primary/secondary cones	Aluminium	150x120x46	Cast moulding
Drive wheels/shift mech.	Steel		Injection moulding
Gears	Rubber		Assembly
Case			

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"Model-making offers a depth of detail that can't be achieved through any other form of communication"

06.

Anton Grimes
LINK
URBAN SCOOTER SYSTEM

Movement is crucial to our lives, however current methods of transportation are limited in the way they can be used and have a clear, negative impact on the environment. With a rising population and population density, there is an increasing demand on an already limited infrastructure.

The Link scooter system is designed as a modular transport solution that can be retro- fitted to existing Streetscape Smart Poles.

Link operates by housing share-scooters in a series of hubs. The hubs act as both a charging station and as the hire and return stations for the scooters. This system gives the user independent movement at any time.

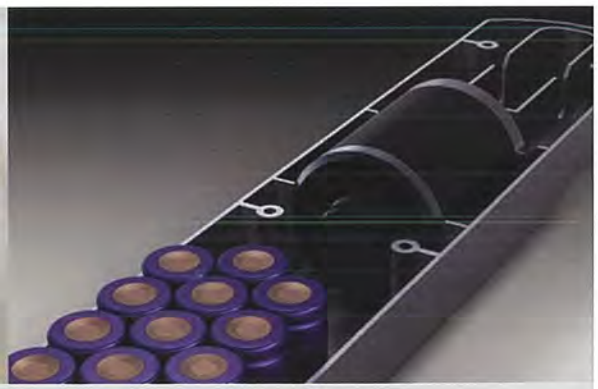
The scooters and hubs are constructed from a series of robust aluminium castings and pressings. These parts house polycarbonate and ABS mouldings, which form the physical interface, including the scooter release and power indicator.

Each scooter is fitted with NiMH rechargeable batteries and a 24 V electric motor, which assists the user when travelling between hubs.

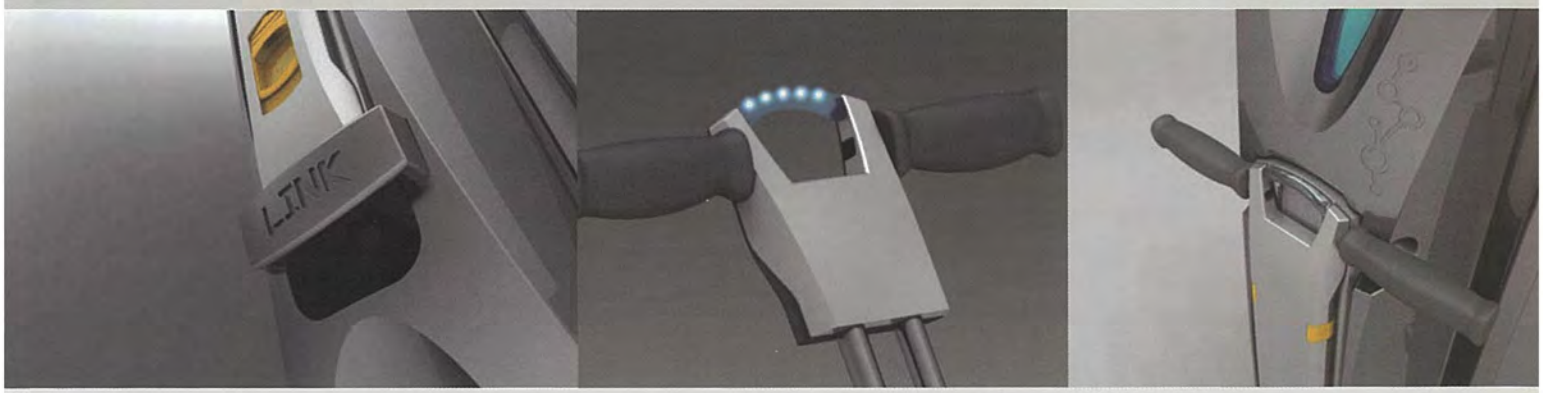
The system works as a public hire and share network similar to those in other countries, such as Velib in France.

The scooter systems links up existing transport methods within the city.

The scooters are assembled in a modular series of pods that can be fixed to existing Smart-Poles.



The pods charge the scooters NiMH batteries while they are docked.



PART	MATERIAL	DIMENSIONS	MANUFACTURING
Kick-bar	Aluminium	212 x 65 x 55	Sand Cast
Base scooter shell	Aluminium	600 x 112 x 87	Die-Cast
Release handle	ABS	150 x 62 x 15	Injection Moulded

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"To design is to explore the power of form, of function, of technology, and of the desire for an object."

07.

ROY HAREGUNA

SQUAD

FIREFIGHTER POSITIONING SYSTEM

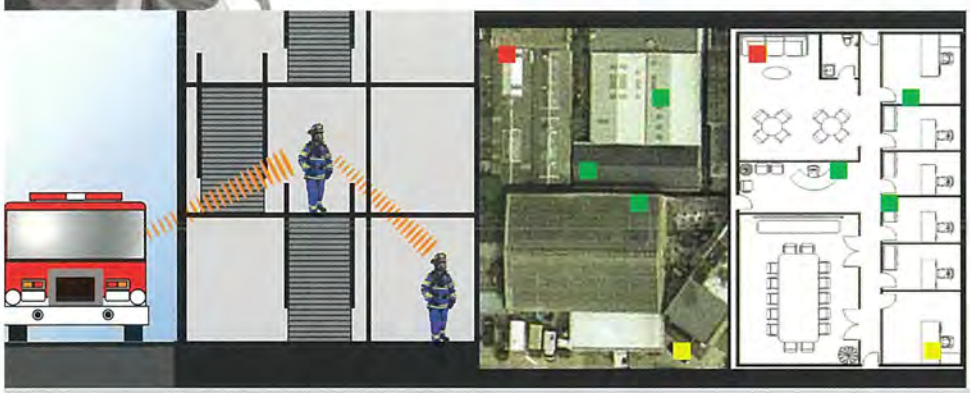
Firefighters by nature possess a high degree of risk in the performance of their duties in an effort to save lives of others. Fire in high-rise buildings is possibly one of the most challenging incidents for firefighters. The response time involved is extended significantly due to the additional time required to reach the fire area.

Positioning problems may arise from complex building layout. A Firefighting team within a building has the chance of separation and getting lost inside an unfamiliar location. The possibility increases greatly with higher risk when collapsed structure blocks corridors and main hallways of a building.

Squad is an indoor positioning system device that allows the user to identify current location in reference with other units and command centre outside the building. The device also gives a surrounding map for the user, drawn by a sonar system inside the device, providing vital information about the area where visibility may be next to nothing.

The unit can be used to send distress signal with loud alarm to other units and the command centre in the event of emergency. A built-in motion sensor also triggers the signal after 30 seconds of non-movement to guide other units in locating the firefighter in trouble.

By working together with the command centre and other units, the Squad positioning system will help firefighters to optimise their performance in life-threatening situation. All incident data are recorded and can be reviewed later on for reference or improvement training purposes.

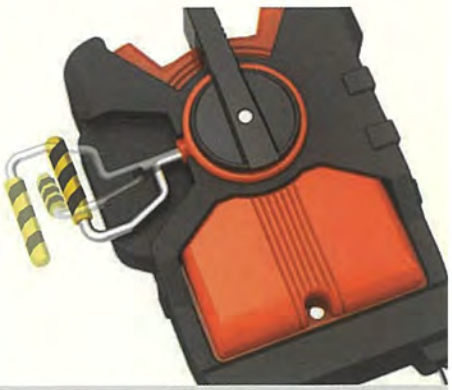


The signal of the first Squad unit is relayed and extended by the integrated repeater of the second Squad unit to extend the range and to transfer the information gathered by each units.

The command centre can assist any Squad unit that needs assistance with direction through radio. The collected map can be overlaid with gathered satellite images or building floorplans when available.

The robust and rugged Squad unit displays a mini-map of the scanned environment, to show pathways. Other units are also visible, displayed with clear symbols to indicate different status.

SQUAD positioning system



PART	MATERIAL	DIMENSIONS	MANUFACTURING
Outer protector	Fluorosilicone	75x146.5x32	Double-shot moulding
Inner casing	Polyetheretherketone (PEEK)		Injection moulding
Carabiner	7000 series aluminium		Insert moulding

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"imagination is more important than knowledge "

08.

GRANT HUMPHREYS
MAIRINE
SAFETY WETSUIT

Big wave surfing is a 21st Century phenomenon. It is the fastest growing extreme sport that exists today, with over 2000 big wave clubs worldwide. In contemporary society many thrill- seekers are turning to the ocean for their hit of adrenalin.

Developments in weather forecasting, internet and global travel provide an opportunity for surfers to log on to the internet, see a swell developing on the other side of the globe, board an aeroplane, and arrive at the location the next day.

With increased popularity, surfers are going to greater lengths to catch the ultimate ride. In such an unpredictable environment, one small mistake can be fatal. The nature of the sport makes it extremely dangerous, and with a rapid increase of amateurs competing, the numbers of injuries, and even deaths, will continue to rise in the future.

mAIRine is a safety wetsuit top specifically designed for tow-in, big wave surfing. Unlike current life vests that are used in the sport today, which were originally designed for open- ocean emergencies or other still water sports such as water skiing, mAIRine's safety features target the extreme conditions found in big wave surfing.

The small air canister located on the back and accompanying mouth piece on the wrist, are designed for self rescue in a situation where the surfer is held underwater for a critical period of time. The inflation bladder is another key feature of the safety vest, designed for an emergency situation when the surfer is rendered unconscious underwater. A manual timer is used to trigger the inflation bladder, programmed by the surfer by manually winding a spring- loaded dial to a pre-designated time.

Once the surfer enters the water and is immersed 0.5m below the surface, a Hydrostatic valve pierces the CO2 canister located inside the bladder. If the surfer remains submerged, the jacket will inflate, bringing the surfer to the surface for rescue.

The air canister is housed in a high density foam which doubles as extra buoyancy. The tube is then stitched into the neoprene and connects the air canister to the mouth piece.

mAIRine contains many safety features that provide extra security for the surfer. Above shows a harness system that locks the surfer into the wetsuit top.

The mAIRine wetsuit top is designed to tackle any big wave conditions.

mAIRine

Jacket design

PART	MATERIAL	DIMENSIONS	MANUFACTURING
Inflation dial	Neoprene	400x1020	Stitched/Glued/Seamed
Air canister	High density foam		Casting
Mouth piece	Stainless steel		Moulding
Neoprene vest	Rubber		Assembly




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"Design is interpretation of living; for the love of people and life."

09.

MIN KONG
GENIE
INTUITIVE NOTEBOOK

Together with the development of information and digital technology, computers have become an integral piece of everyday technology in the 21st century, used in work, communication, education, and a myriad of other applications in all facets our society.

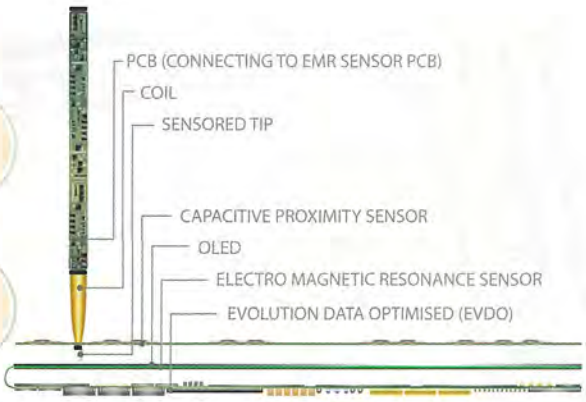
Although computing technology now occupies a ubiquitous position within our lives, it is still unfamiliar and difficult to approach, particularly for infrequent users.

Genie is a evolution of the home computer, designed for day to day usage. For average home use, computers need not be as complex, or include computing power which we see today. Genie connects to wireless broadband internet, allowing users to browse websites, email, and access simple computer applications, such as Word and Excel, which are available online. Hence Genie does not require much storage capacity; Static Ram will be sufficient to provide internet connection and storage, which should result in lower cost, simpler interaction, and increased reliability.

Studies have shown that fear of unfamiliar technology is the major deterrence against the use of computers. Genie is therefore designed to accommodate these issues, incorporating hand writing as the primary input process, with the interface designed to be used like a book, which increases the familiarity with the interface and ultimately improves the approachability of the technology. This approach hopes to allow many of those who find computing technology alien to benefit from its use.

Genie allows free hand writing, various decoration of background and display during use and non-use.

Three pages mainly allow organisation of web sites, though by default each page is dedicated to web browsing, email and online applications, which can be rearranged. Other options are available online to be downloaded according to user preference. Web pages remain unchanged between turning the pages.



Internet connection is established through EDVO mobile Internet connection. Writing is possible through EMR technology together with the pen. Capacitive proximity sensor is used for the buttons.

Genie

PART

Pages
Screen
Charging dock
Pen
Front page
Main casing

MATERIAL

Pressed acrylics
Polycarbonate

DIMENSIONS

193 x 212

MANUFACTURING

Double shot injection moulding
Injection moulding
Assembly line

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*"The ability to see things differently to everyone else.
To notice the details that no one else does.
The ability to change the world for the better.
That is Design."*

10.

JAMES KWONG
SPEAR
SPORTS DIAGNOSTICS SYSTEM

In the world of sport professional athletes strive to be the best, to constantly improve, increasing in performance and being the best at what they do. However, many athletes suffer a premature end to their careers or develop problems later in life due to injury.

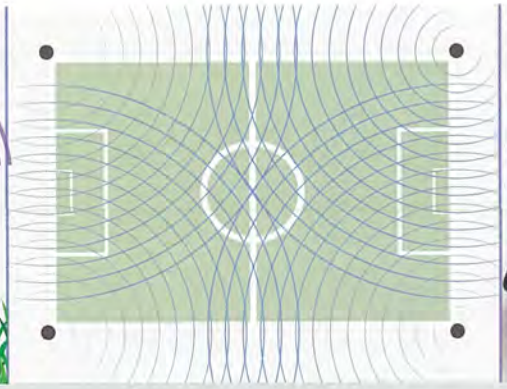
In Football terms, studies show that optimal performance and player safety are the two highest rated factors on a player's mind.

The SPEAR system is full bodied product that allows for real time physical and physiological analysis of a player without hindering performance. This system aims to record, analyse and visually represent data in an easy to digest manner. This allows coaches and managers to analyse and make critical decisions based on current player performance and statistics.

A series of biosensors implemented in various parts of the players kits allow information to be wirelessly transmitted via RFID to a set of four wireless gates that constantly scan the field and gather data. This information is then sent to a portable handheld device to display a numerical and visual reading on a player's form.

The sole is designed with a series of accelerometers and micro batteries to triangulate and analyse foot movement, reaction time and direction change. Such data can also be used to analyse a player's running posture, with the efforts of post match analysis. This allows for specified training regimes and posture correction, which will aid in the prevention of hip injuries which is the most common form of injury in professional football players.

Data from the biosensors release a signal via RFID. The sole is designed to accommodate the MEMS and micro technology.



Strategically placed wireless gates sends and receives an omni directional transmission in a radius of up to 70m.

Wireless gate designed to withstand up to 120kg of force and features contoured hand grips for easy removal.

SPEAR






PART	MATERIAL	DIMENSIONS	MANUFACTURING
Sole	Carbon fibre composite	297 x 98	Injection moulding
Wireless gate	ABS	184 x 96	Double shot mould
Portable handheld	TPU	164 x 224	UV glue
	TPE		

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"Design is eternal. It is knowing why, when, what and how to designate, which can successfully realise a pure idea into reality."

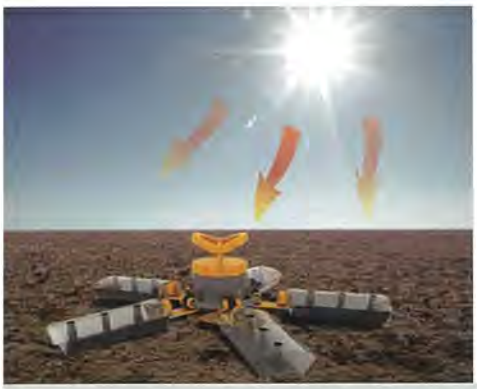
11.

JASON LAM
SOLAQUA
WATER SOLAR STERILISATION

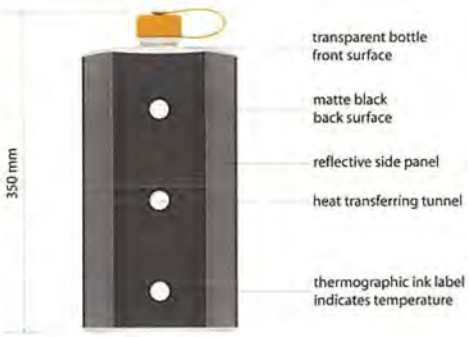
Around six percent of the world's problems are related to water and diarrhoeal diseases. Africa accounts for almost one-third of these problems due to inadequate access to improved water supply. This results in the death of two million people a year, most of whom are children under the age of five. The most significant course of action is the intervention of safe water provision.

Solaqua uses a relatively new water disinfection process by utilising the sun's heat and ultra-violet rays. This process is called solar water disinfection, also known as SODIS. SODIS is a simple, environmentally sustainable and low-cost solution for drinking water treatment at household level for people consuming microbiologically contaminated raw water. A synergy of UV and heat destroys pathogenic microorganisms living within contaminated water. SODIS is ideal to disinfect small quantities of water of low turbidity. Contaminated water is filled into transparent plastic bottles and exposed to full sunlight for six hours. However, if water temperatures exceed 50°C, one hour of exposure is sufficient to obtain safe drinking water.

Solaqua's innovative bottle shape is designed to maximise the efficiency of water treatment by laying flat on the ground. The curved back surface is black to absorb the sun's heat, while the sides are reflective to bounce the sun's rays into the water. A funnel with built-in cloth filter is first utilised to reduce the turbidity of the raw water. Tunnels built into the bottle allow heat to be distributed evenly through the depth of water. A thermographic label is located within the tunnels to indicate that the water has reached a temperature of 50°C and is safe to drink.

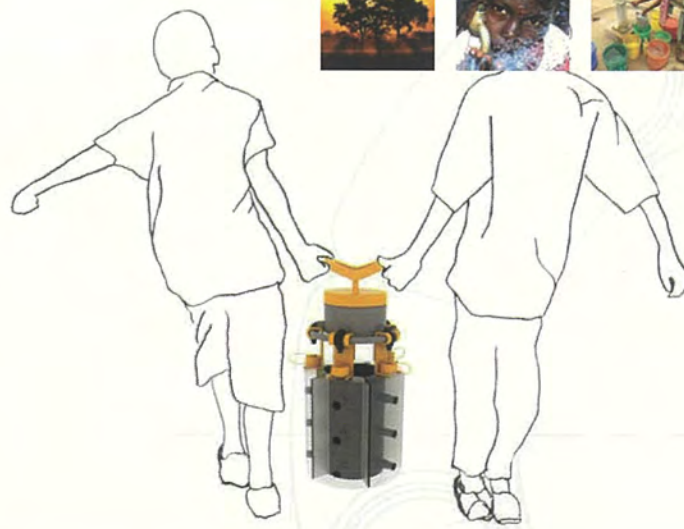


The sun emits invisible, ultra-violet (UV) and infra-red (heat) rays to disinfect the water enclosed in the specially designed transparent bottles. The combination of UV and heat is known as Solar Disinfection (SODIS).

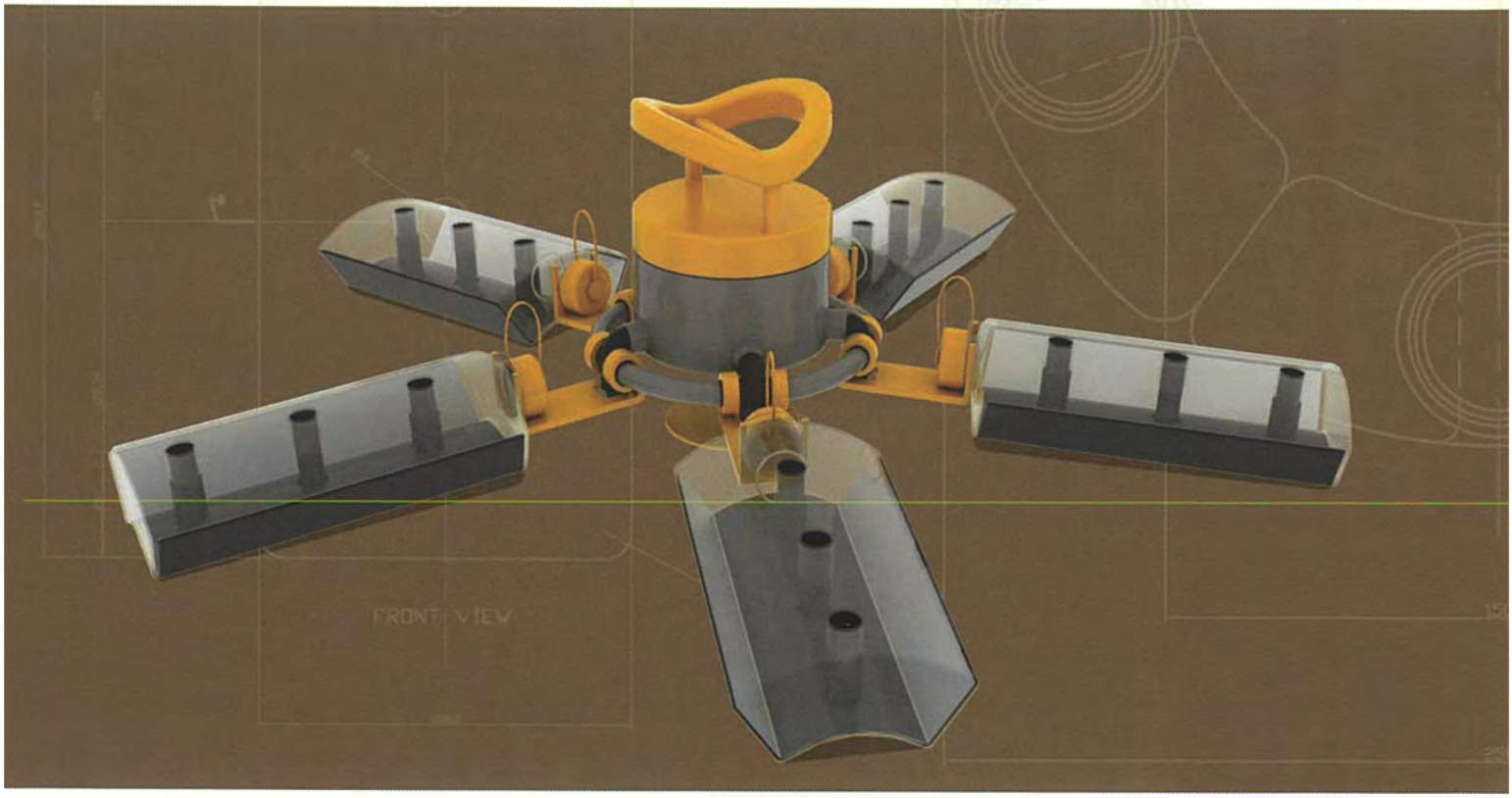


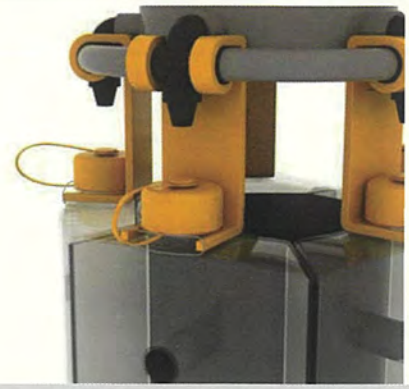
The Curved black surface absorbs heat while reflective sides direct UV and heat rays into the body of water providing quicker disinfection.

Simple graphics are printed onto each bottle to show how to use Solaqua. These are located on the back of each bottle in a contrasting silver for ease of readability.



SOLAQUA





PART	MATERIAL	DIMENSIONS	MANUFACTURING
Handle	ABS	150 x 100	Self skinning urethane
Cloth filter	Sari cloth	128 x 15 x 1	Weaving
Funnel	Polycarbonate	150 x 85	Injection moulding
Cap	Polypropylene	45 x 50	Injection moulding
Bottle	PET	300 x 145 x 50	Blow moulding

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" It speaks for itself "

12.

ANGELINE MELOCHE
CELSIUS
STACKABLE REFRIGERATOR

Background
The range and quality of food continue to increase and diversify. We have become connoisseurs of healthy, exotic and specialty foods as well as conscious of the power of our diets to enrich, heal and sustain us. Each food requires unique storage and temperature control in order to protect its nutrients, freshness and storage lifetime.

Celsius allows for a complete customisation of diet and living. As lifestyles become busier and more complex, we shop less and buy more in combination with smaller top-ups throughout the week. The user may choose the configuration of the refrigerator in order to cater for specific foods as well as to fit within the living space. Celsius can also be assembled by the user.

Rationale
Celsius is a stackable refrigeration system complete with custom inserts for fruit, vegetables, wine, jars & bottles, meat & fish, freezer, pantry as well as optional shelf storage. The user can purchase additional cabinets in response to individual living requirements and eating habits. Drawer or door opening modules are chosen according to preference and ease of use.

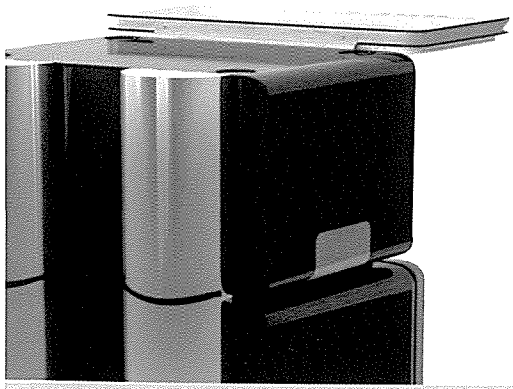
Each module includes two airstream pipes for supply and return of refrigerated air to the cabinets. The cabinets are set to the required temperature using a digital interface which includes presets for 5 temperature settings. Airflow is controlled according to the thermocouple, which senses when the temperature has dropped below the required setting.

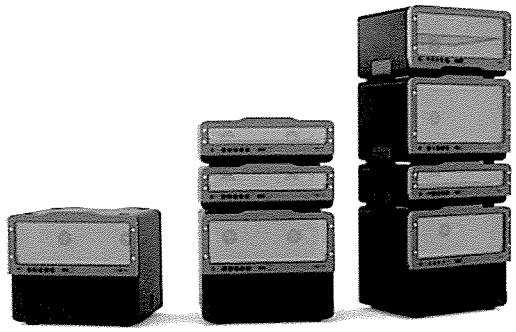
A modular system makes configuration simpler. The user is able to purchase units according to changing needs.

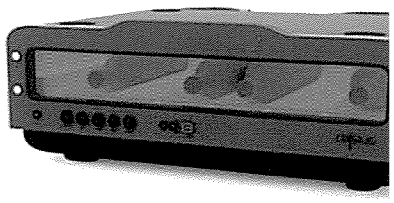
Inserts are added to the drawers according to the food type to be stored, from frozen goods to fresh fruit, pantry and wine.

Recessed handle grooves compliment the full- extension drawers and allow for a streamlined, hygienic surface.

celsius







PART	MATERIAL	DIMENSIONS	MANUFACTURING
Doors	Tinted Double-Glazing	600 x 25	Assembly over Frame & Gaskets
Outer Cabinet	.5mm Commercial Steel	600 x 400	Automated Assembly Line
Inner Cabinet	White ABS	550 x 375	Vacuum Formed
Air-Stream Pipes	PU Insulated Steel	85 radius	Riveted & PU Injected

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"God is in the details"

13.

STAN RAGUINE

OFFICE POD

DEMOUNTABLE BUSINESS BOOTH

OfficePod is a telecommunication business solution offering higher office capabilities not possible with portable devices; such as scanning, printing, fax, landline phone, video conferencing, paper shredder, power charging of personal devices and stationery, all in a quiet environment.

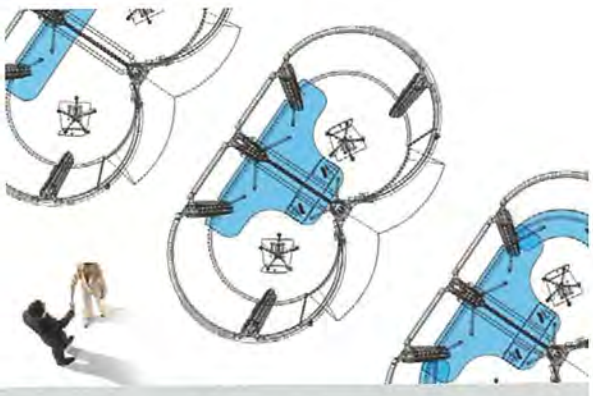
The concept is a result of increasing *telecommuting* and *hotelling* trends, and is inline with state government's plan to create satellite CBDs in all metropolitan hubs to alleviate the strain of commuting and housing density.

The Pod offers public (mobile phone or credit card payment) and subscription based service (key fob for log in access security). The latter enables clients bespoke settings determined by their industry, company and personal profile.
For example, the pod recognising a client from a financial firm based in Zurich will display in the secondary display company messages transmitted from HQ, financial news feed native to occupant's country, and stock ticker/news relevant to its subsidiaries and main stakeholders.
This ensures information delivered is timely and appropriate.

Pods may be located in areas such as airport concourses, central rail stations, convention trade shows and offered by both public and private enterprise.

The deployer has some degree of customisation and the panel cladding design allows the opportunity for a shopfitter to apply corporate colours and branding.

Ramp gradient of 1:8 and door opening 820mm complies with AS1428.1 Wheelchair access standard.

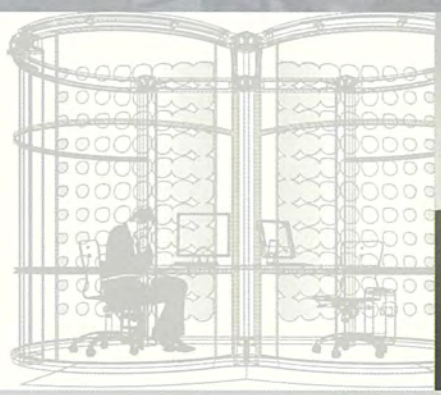


Security motion sensors automatically logs off to prevent identity theft if it detects the user has left the pod.

Modularity and cable management extrusion profile is a system of rails onto which different accessories can be added to adapt the pod to its context of use. (desk stringers, coat rack, speakers, charging dock, shelving)

Layout deployer can configure floor plan to meet different needs. Pod can be configured into a pair of partitioned single workstations or one single meeting space.

office POD



PART	MATERIAL	DIMENSIONS	MANUFACTURING
Joiner	316 grade stainless steel	AO 4100 x 2093 x 2500	Lost wax casting
Girder	Architectural aluminium 6062-T5		Profile bending
Column	Architectural aluminium 6062-T5		Extrusion
Cladding	Frameless glass		Curved toughened glass

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"good design has the ability to seemlessly integrate into our lives. bad design points itself out"

14.

KEN SEETO

SONICTEK ATLANTIS

UNDERWATER BUDDY TRACKER

SCUBA diving allows us, as human beings, to explore a world beyond our wildest imaginations. Entering this underwater world requires a set of rules which ensures that we return safely to the surface.

One fundamental practice in the sport of SCUBA diving is the 'Buddy System'.

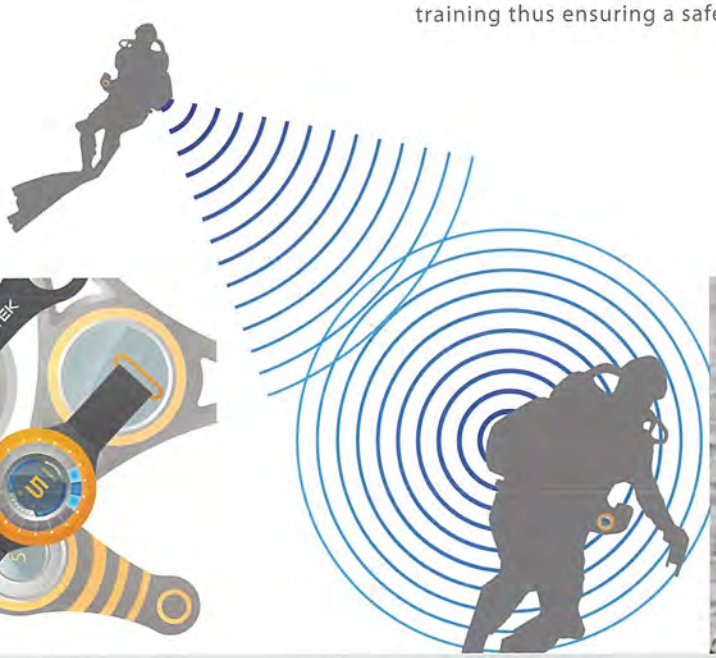
The SONICTEK Atlantis consists of two devices that work in unison to track the location of a fellow diver, otherwise known as a dive buddy, whilst underwater.

The tracking of your dive partner is achieved through the use of acoustic pingers that send out a signal via the transponder which is attached to the tank. The location of your dive buddy is displayed to you via the receiver. An LED light ring will illuminate the direction of your dive partner in relation to you.

The SONICTEK Atlantis is attached to both you and your dive partner so that you both have ability to track the location of your dive partner.

The SONICTEK Atlantis has been designed to aid a diver in tracking their dive partner. It is still good practice to observe the fundamental dive rules that are learnt during dive training thus ensuring a safe return to the surface.

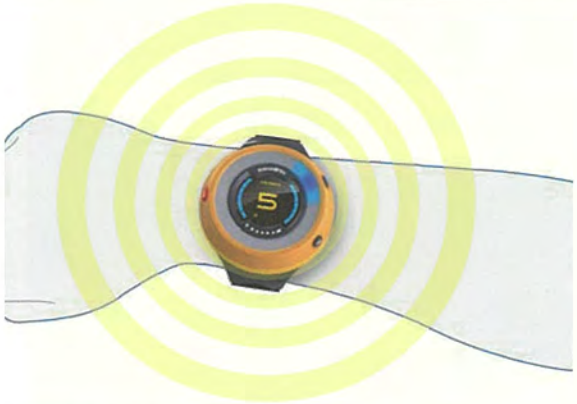
Concept development illustrations



Omnidirectional signals are sent as well as received by the transponder.

Transponder is attached to the tank which pulsates every 5 seconds. The receiver displays the location and proximity of a dive partner.

SONICTEK
ATLANTIS



PART	MATERIAL	DIMENSIONS	MANUFACTURING
Transponder	ABS	316 x 77 x 28	Injection moulding
Receiver	Polycarbonate	269 x 66 x 26	Double shot moulding
	Silicone rubber		Machining
	Stainless steel		

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"Design is about exploring possibilities and make difference out of it."

15.

XINNIA SUTANTO

HYDROLIFE

RAINWATER HARVESTING SYSTEM

"Access to safe water is a fundamental human need and therefore a basic human right."
-Kofi Annan, United Nations Secretary-General

Millions of people around the world have been affected by natural disasters. Damage by natural disasters increases the difficulty in acquiring basic necessities.

Hydrolife is a rainwater harvesting system that alters into an emergency aid product. The design is focusing on function and utility to suit such an event. It is packaged into a single unit for logistic and transportation purposes.

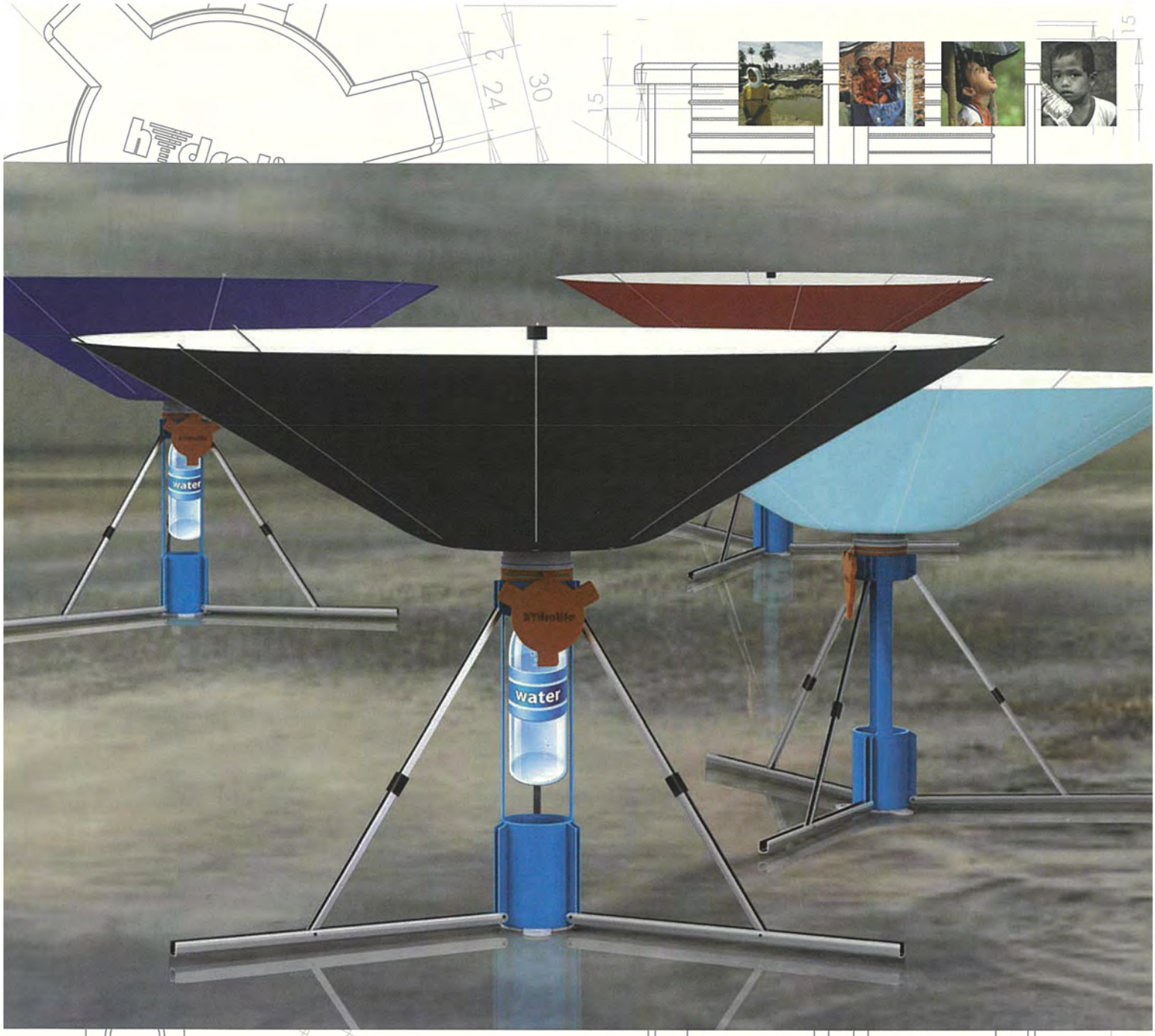
The manufacturing processes are intended to reduce costs and provide robustness to the design. Existing products are also used such as an umbrella and PET bottle to capture and store rainwater. The unit comes with different size screw thread attachments to fit different bottles.

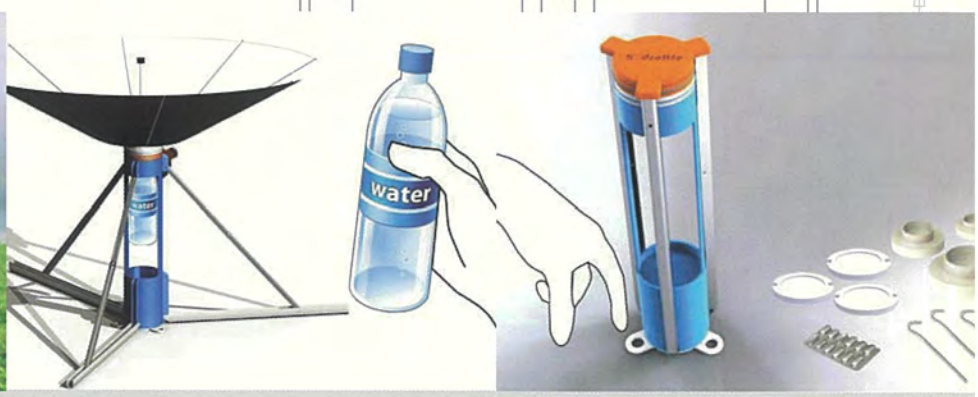
Simple operation has been taken into account for quick response to the product and to suit different users from various cultural backgrounds. The unit can be easily and quickly assembled. It can be transported by individuals or families during periods of rain.

Hydrolife is packaged into one single unit.

Support arms are made out of u-channel aluminium extrusions for compact storage.

Existing umbrella design is embedded within each unit to capture rainwater. Readily available PET water bottle with standard screw thread can be use to store water.





PART

Extruded tube
Lid assembly
Support arms

MATERIAL

PVC pipe
Polypropylene
Aluminium

DIMENSIONS

590 x 500

MANUFACTURING

Extrusion
Injection moulding

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"Good design comes from knowing what's happening out there and coming out with something better, something that actually makes an impact on our lives"

16.

SILVANI TANLIANG
EAT RITE
FOOD INGREDIENTS SCANNER

Everyone has different preferences and restrictions when it comes to selecting pre-packed food from stores. It can be due to health concerns such as food allergies and intolerances , or even religious restriction on consuming certain types of food, such as kosher and halal food. Eliminating genetically modified food from daily consumption and purchasing foods that are locally grown and made has become an emerging food trend in Australia. There are also people who look out for certain ingredients when selecting food such as preservatives, colouring and MSG (Monosodium Glutamate), primarily due to health concerns.

Food allergies affect 1 in 20 children and 1 in100 adults in NSW. In fact, Australia has one of the highest allergy prevalence rates in the world and it tends to be hereditary.

'Eat Rite' eliminates the need to read through the small print on food packaging, which is a problem for the elderly and people with eye problems. For some of us its just time consuming. By scanning the card that has been preloaded with an individual's food choices and preferences, 'Eat Rite' is able to match the scanned product with the given information.

LEDs and sound indicators are fitted to the device allowing consumers to easily distinguish whether they should or should not purchase the food product. The LED indicator will show 3 different colours to represent safe for buying indicated by green, rethink might contain certain ingredients indicated by yellow, and do not buy indicated by red. Further information such as prices, total purchase and other food options can be viewed through the LCD monitor. With millions of products in store, it is now easier to find the right products for every single one of us.

'Eat rite' can be picked up at charging stations located at the entrance of the supermarket. Customers can returned the device to the charging stations near the check out areas.

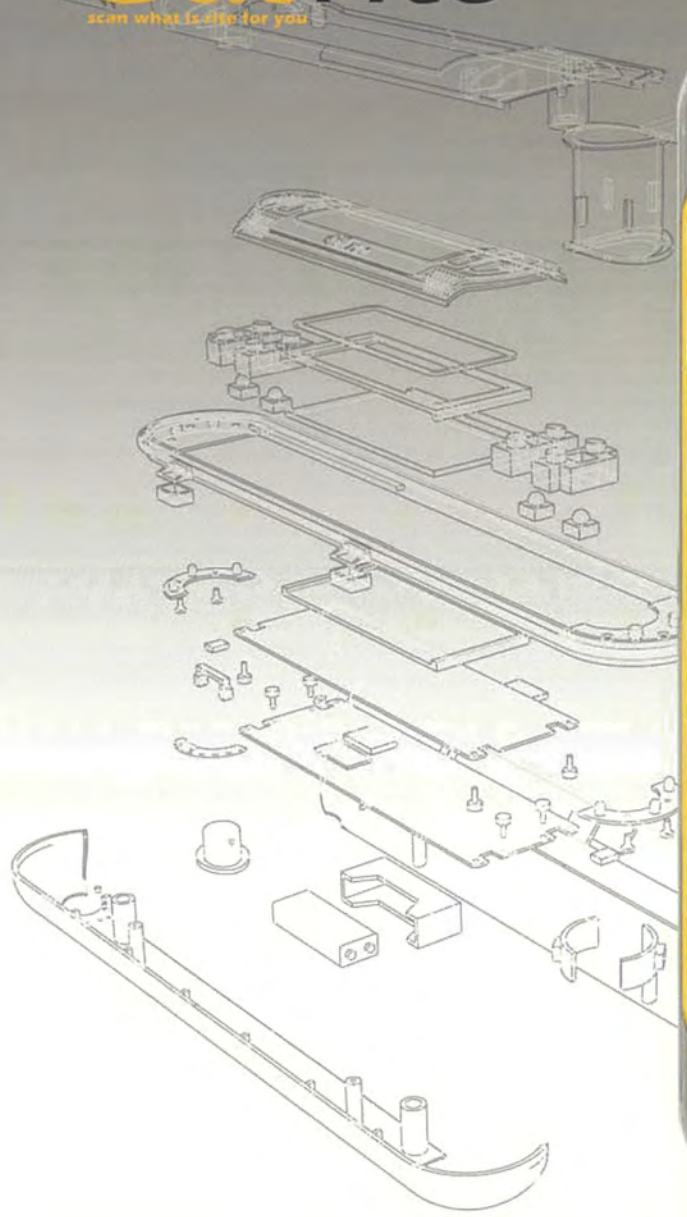
Customers are able to update their food preferences and choices through the internet. All information will be updated and saved into the 'Shopper's card', which has to be read by the device before scanning any products.

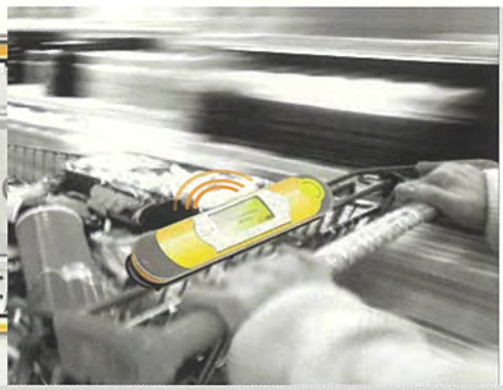
The unique docking system allows customer to place 'Eat Rite' easily without hassle. 'Eat Rite' will also be automatically turned on once it is placed on the dock, which has been equipped with RFID tag.

eat rite

scan what is rite for you





PART

Trolley
Basket
RFID

MATERIAL

ABS
Polycarbonate
Polypropylene
Rubber

DIMENSIONS

280 x 50

MANUFACTURING

Injection Moulding
Assembly line

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"For every problem there are an infinate number of solutions, design strives to discover every one of them."

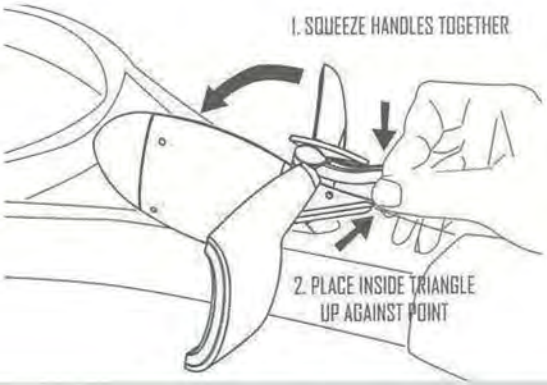
17.

SIMON TAYLOR
SIDE-KICK
SWING ANALYSIS SYSTEM

The Side-Kick system is designed to provide the user with feedback on their tennis shots and general play.

The product can work either as a solo use system whereby the user gets feedback on their play as they play and use the product. Or alternately by coaching staff to help reinforce teaching, allowing them to shift focus to more complex skills or provide a level of supervision while students engage in separate activities or games.

The system consists of three main parts, the most important of these is the tennis racquet attachment, this contains a device that allows the nature of each shot to be read, converted into data and sent to the second unit placed on the hip. This unit processes the information, stores that data, calculates statistics whilst also containing a small speaker that can be used for auditory signals. The third unit is a watch-like interface worn on the user's wrist, that allows the user to review information regarding their shots, statistics about their game play, adjust settings, activate a number of training activities or during a match it can be used to keep score.



Three product placement points:
1. Racquet Clamp for swing analysis
2. Hip Unit for data process and additional accelerometer for movement
3. Wrist interface for control and information

Main internals, include microprocessors, memory, accelerometer for court positioning and calculations for swing, speaker and rumble pack for positive and negative reinforcement from the swing

Racquet clamp, is easily applied by simply spreading the arms by squeezing, placing within the triangle on the racquet, and letting the arms clamp back on the outside, process is then secured by tightening the top nut.

SIDE-KICK
Swing Analysis System

PART	MATERIAL	DIMENSIONS	MANUFACTURING
Racquet clamp	ABS/Silicone/Titanium	95 x 62 x 68	Injection moulding
Hip unit	ABS/Polycarbonate	55 x 80 x 15	Injection moulding
Wrist interface	ABS/Poylcarbonate	69 x 32 x 14	Injection moulding

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"Simplicity is the essence of good design."

18.

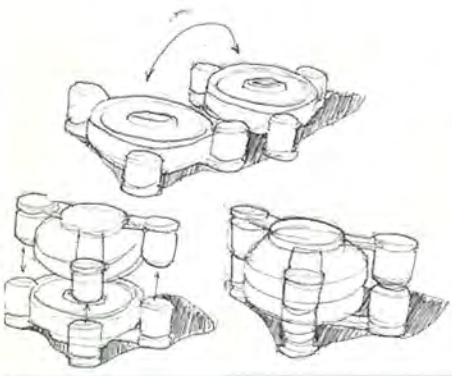
LEO WAN
SKRATCH
PORTABLE MP3 DJ SYSTEM

Skratch is a portable MP3 DJ'ing system which allows anyone who owns an MP3 player to plug into the Skratch mixer, load up the song and instantly scratch and mix their favourite songs just like a real DJ. Skratch has all the basic DJ functions like scratching, pitch shifting, cueing and an equaliser. All that is required is an MP3 player and a stereo or speaker system and then you can bring the party anywhere with you and party it up!

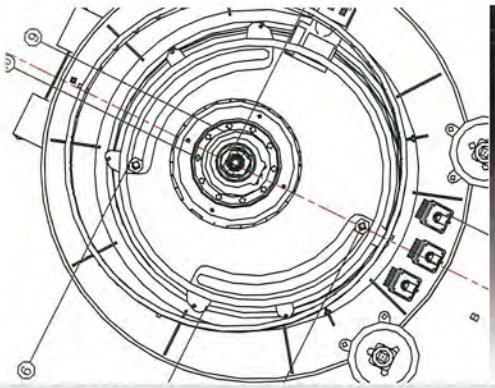
The Skratch mixer contains fout USB ports allowing you to plug in MP3 players, external hard-drives or thumb drives containing music files. The mixing unit has an inbuilt 40GB hard-drive that allows you to transfer all your favourite songs into your own playlist and create instant DJ performance. The mixer contains all the basic mixer components, mic inputs, headphone outputs, cross-fader, volume fader, gain and master gain knobs.

The turntable unit contains three EQ knobs which controls the treble, mid and bass of the music. It also has a play/pause and cue button to ease mixing. The scratch pad emulates the texture of real vinyl records, and in the centre is the pitch shifter which changes the speed of a song to allow mixing.

To pack up the system, the mixer unit has to removed first. Then turn both turntables outwards and close it up. Put the mixer in the middle compartment of the Skratch, then put the turntable units in and you're ready to go.



Skratch is a portable MP3 DJ'ing system, which allows users to plug in any MP3 and instantly scratch and mix their favourite songs.



The Turntable unit contains a play/pause and a Cue button to ease mixing. It also contains three EQ knobs controlling treble, mid and bass.

Skratch can be easily disassembled and packed for transportation. Remove the mixing unit, turn the turntables sideways, fold it up and you're ready to go!

SKRATCH

PART

Mixer unit
Turntable unit

MATERIAL

Aluminium
ABS

DIMENSIONS

Open: 642 x 248 x 50
Closed: 240 x 146 x 269

MANUFACTURING

Assembly line
Pressing
Injection moulding

wwansey@hotmail.com

"Shake and bake"

19.

JAMES WANSEY
UGO STROLLER
SAFETY BRAKE

The UGO safety brake is an automatic brake system for strollers and prams that ensures that the stroller cannot accidentally roll away and cause injury to a child.

Around 580 children are treated for stroller related injuries at hospital emergency departments in Australia each year. Around 10% of these are estimated to have arisen from accidental roll-away situations; tragically in 2007 two fatalities occurred.

The UGO brake system relies on a wireless communication between the wheel hub of the stroller and the hand-held unit which can be worn by the parent. When the parent and the stroller separate by more than 2 meters, the wireless connection is lost and the brakes pulse to bring the stroller to a controlled stop. The brake system is powered by the rotation of the wheel and is fully contained within the hub, ensuring it can be adapted to a wide range of strollers on the Australian market.

The hand-held unit's graphic display also provides the parent with information which includes steps taken and distance travelled. This information can be uploaded to a PC, recorded and viewed to assist in exercise planning.

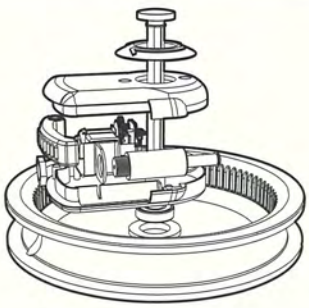
The UGO Safety Brake System provides parents with a product that both increases the safety of their child and provides information that is useful to plan and maintain a healthy lifestyle.

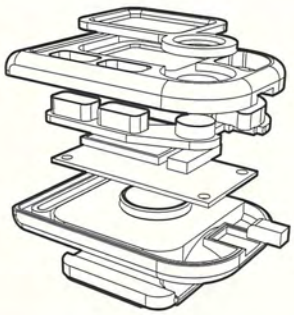
When the parent and stroller separates by more than 2 meters, the brakes pulse to bring the stroller to a controlled stop.

As well as providing a wireless link to the stroller to monitor parental proximity, information including distance travelled and steps taken is available to the parent on the hand-held unit.

When the connection to the hand-held unit is lost, the brake shoe engages against the rim of the wheel. The system can also be manually over-ridden, indicated by a red colour replacing the green dot.





UGO™

PART	MATERIAL	DIMENSIONS	MANUFACTURING
Wheel hub	Nylon	45x120	Injection moulding
Brake unit	ABS/PC blend	80x120x35	CNC punch and press brake
Hand-held unit	ABS/PC blend	45x65x14	Hand assembly

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"Good design inspire others to think in ways never before"

20.

KIMBERLY WONG
CUB
TOURIST INFORMATION KIOSK

CUB is a multi-functional information kiosk and advertising stand designed to assist visitors and travellers in wayfinding and to provide transport information for commuters. It presents users with up-to-date digital information and accurate directions which can be transferred to mobile devices to improve information accessibility and availability.

By navigating through the interface, users can locate facilities, events and addresses which are sorted into categories for easy browsing. According to the search topic, the built-in intelligent system can retrieve similar results and provide suggestions which the user may be interested in, such as restaurants to dine or places to visit.

CUB kiosks are located throughout the CBD and can direct users to the next closest kiosk where they can seek further assistance. When the information kiosk is not is use, it doubles as an advertising stand. This allows opportunities for companies and service providers to display their advertisements on the kiosk and to generate revenue to account for service and maintenance cost for councils. This also encourages companies to be involved in supporting a free service for the convenience of the public.

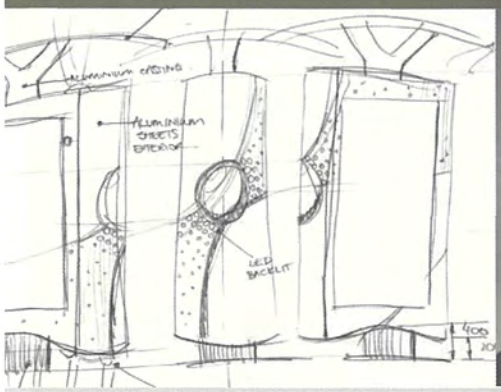
The roof design is customisable to cater to different locations and provide a variety of options while maintaining the overall uniformity of the kiosk throughout the city. The clean and user-friendly interface is simple and easy to use to ensure an enjoyable and interactive experience for all users.

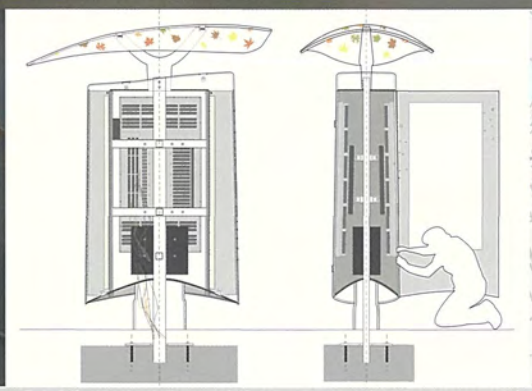
CUB allow users to locate facilities, places and events by providing map directions and event details. This information can be transferred onto mobile devices via Bluetooth service for user convenience.

The camera function allows users to capture their experience and share immediately via email service or post online on supported social network communities.

The advertisement display automatically changes to the interface screen when users are detected by the proximity sensor.

cub
community hub





PART
Roof and branch structure
Top cover
Doors and end features
Base and support plates

MATERIAL
Polycarbonate
Steel
Aluminium

DIMENSIONS
1950 x 2425 x 1096

MANUFACTURING
Glass printing
Casting
Forming


Breville
Breville

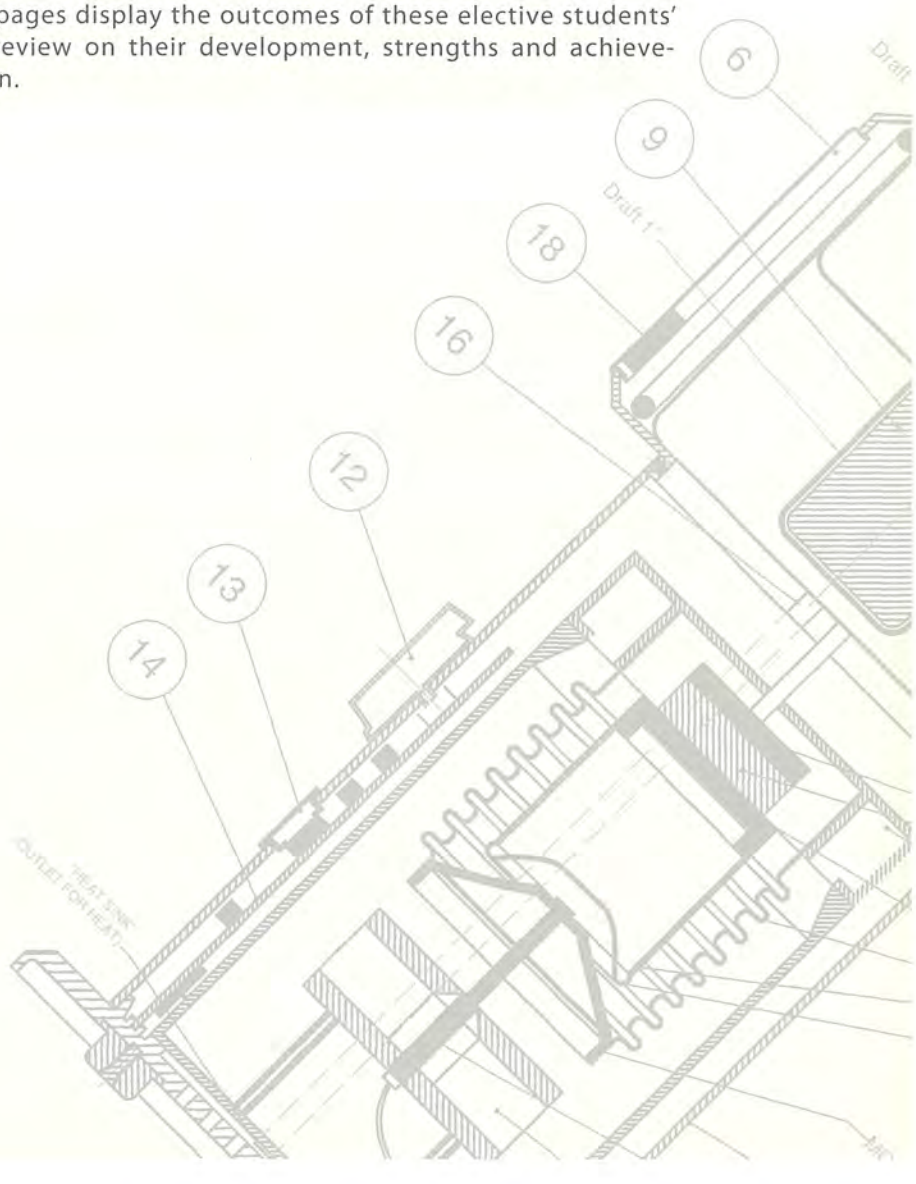
PROJECT HISTORY 2008

As an alternative to the Major Design Project, final year Industrial Design students are also offered an elective path to develop skills in a niche area specific to their design interests and talents.

The elective streams cover a broad spectrum of industrial design related specialities, from new product marketing and development, design management, graphic design, computer-aided design, furniture design, corporate visual identity and branding, through to exhibition design, multimedia design, packaging, lighting and studio photography.

The development of a variety of skills and practices as a designer is crucial in understanding and being able to contribute to the hybrid design industry.

The following pages display the outcomes of these elective students' introspective review on their development, strengths and achievements in design.



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"designing the possibility to inspire the spirit and mind"

21.

HINSON CHAN
PROJECT HISTORY

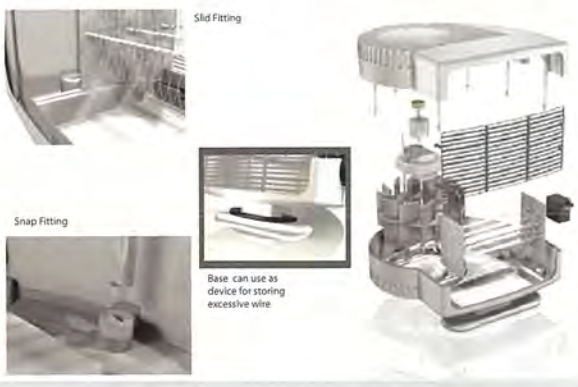
Over the past four years, I have worked on a number of projects which has provided me with a various design skills and a high level of knowledge, in addition I have also developed confidence and strength in my discipline. This knowledge is extremely useful in different fields such as product, graphics, research, and planning.

My key design goals are to understand the market needs and problems as well as finding an innovative and interesting way to implement my design knowledge, with a view to developing an effective solution.

I have developed my design education by being active in volunteer design activities and entering competitions such as Southern Cross Packaging, Light Objects Design Competition, WIPO Logo Design Competition and Street Furniture Competition to challenge my design knowledge as well as practising my design skills.

The Flexible Vase uses polypropylene sheet and velcro to form a vase which is easy to store and install.

Dynamo Flashlight is designed as a vehicle emergency kit. Super bright LEDs, battery-free, waterproof ABS case with nonslip rubber grip and foldable crank handle. Just crank it for 1 minute to get up to 30 minutes of continuous and reliable light



Eco ReDesign - Eco Heater is a redesign project to make the heater more environmentally friendly by slide fitting and snap fitting to minimize material used. Fan has been redesigned to increase the efficiency and base is used to store the excessive wire.

Teenspace Table Lamp - Express is light design concept to invite teenagers to exercise their creativity. Every sheet can be turned, twisted and stretched in different shape that the users wants. This creates different forms to suit their own style, identity and personality

Snap button connects the transparent tube and the flexible sheets

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"perfection grows with time"

22.

JESSICA CHEE
PROJECT HISTORY

Having undertaken four years of Industrial Design has given me the opportunity to learn a range of valuable skills. It has allowed me to learn the design process starting from market research and conceptual hand sketches to model making, followed by technical resolution and 3D CAD modelling.

A selected few of the many projects I've done are presented here, ranging from products for the kitchen, home, office and automotive.

On the right is uHEAT, a project developed in conjunction with Breville. It is an eco-friendly, portable hand-powered food warmer. It's perfect for 1 to 2 persons, where cooking portions can be hard to control, resulting in leftovers that can be easily heated up on another day using uHeat. It serves as an alternative to microwave ovens and stoves for heating up food, as well as keeping it warm. The contoured surface, inspired by Korean BBQ hot plates maximises contact with the embedded heating element and allows food to be heated more evenly. To use it, simply place food on the contoured surface, close the lid and pull on the handle several times until the desired temperature has been reached. uHeat runs purely on human kinetic energy which spins a built-in dynamo connected to gears at a 2:1 ratio, making it completely environmentally friendly.

Salt & Pepper Shaker blue foam model coated with plaster. Salt & pepper can be dispensed simultaneously or separately.

DAB Radio featuring a faceted glass panel with capacitive button controls, embedded LCD panel, and internal antenna.

Handheld car vacuum designed as a complimentary product for Jaguar.

PART	MATERIAL	DIMENSIONS	MANUFACTURING
Vacuum container	Brushed stainless steel	340 x 340	Blow moulding
Lid	HDPP		Injection moulding
Pull handle	HDPP		Injection moulding

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"Great ideas don't have to come from big discoveries. They can come from the accumulated little ones along the way."

23.

MICHAEL DIOLASO
PROJECT HISTORY

During the four years of my Industrial Design degree I have accumulated a range of skills and knowledge. Through the progressive requirements for each project, I have found myself challenged yet also given the opportunity to further develop the ideas that I have learned, and consolidate the skills I have employed.

It has been a period where I have extensively exercised my creativity while also learning to pay close attention to technicality and detail. I have learned and used ways to generate ideas and represented them in various forms to be further explored and conveyed to others. Organisational skills such as time management have also importantly been put into play, as I often have found myself dealing with multiple tasks concurrently.

The main project on the following page involves designing a digital audio broadcasting radio for the brand Bourne & Veglar, conveying a great sense of luxury through its form and materials.

It's very iconic and geometric form implies stability, robustness and weight, adding value with its sense of substance while its flush surfaces of brushed aluminium and black glass give it its elegance.

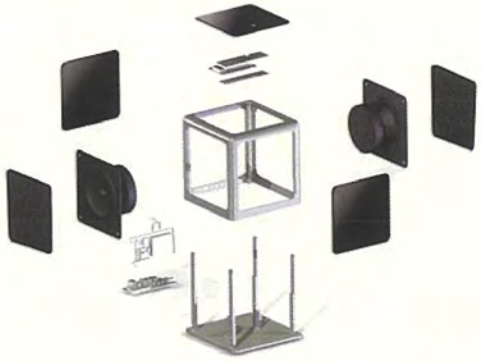
When the power is on, the LCD screen will appear, as well as the controls, from what was once smooth blackness, signalling that the radio is ready for use. Its elevation off the desktop surface with little unseen feet adds a sense of preciousness and distinction from the surface its on.

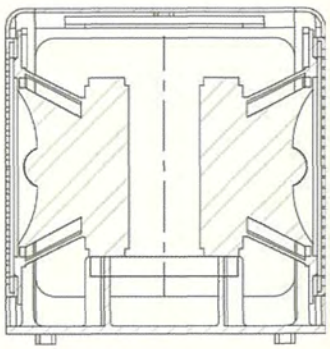
AutoVac: Subaru Styling - This project was to restyle a portable vacuum cleaner to a particular automobile brand.

A concept for a travel product to appeal to people from their mid 40's to their early 60's. It is a stylish passport holder that keeps the passport secure and safe, while with electronics provides information such as altitude and temperature during flight.

Breville 08 Brief - Designed to be more eco-friendly and sustainable. Having two compartments, the user is able to specially heat required amounts of water for one or multiple cups reducing the energy to usually heat the entire contents.

BOURNE & VEGLAR





PART	MATERIAL	DIMENSIONS	MANUFACTURING
DAB Radio Base	Aluminium	154x160x160	Shell mould casting

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"Design to make life better, to offer solutions along with inspiration."

24.

XIAOXI SISI JU
PROJECT HISTORY

I believe good design makes people happy. This is why I am so passionate about industrial design.

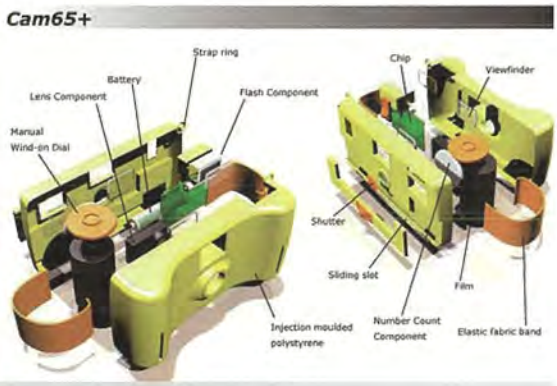
This course has helped me to develop strong expertise in different areas. Over the past four years, I have worked on a number of projects in various areas including product design, 3D modelling, graphics and multimedia, research, management and planning. I have learnt various aspects of design; not only in developing my creativity, communication, computing and design skills, but this course has also helped to build my confidence and strength in the discipline.

Presented are just a few of my favourite projects. I have received Finalist Awards for the Southern Cross Packaging Design Awards, 2006 and Cormack Packaging Awards, 2007.

Design has made me think logically and creatively. I would like to continue my design career to inspire and improve people's lives.

A chocolate box for the Southern Cross Packaging Design Awards, 2006, which is targeted at the luxury market. The design philosophy is sophisticated, yet simple.

A presentation board of 3D modelling and rendering created for a portable music player.



3D modelling of an exploded view for a disposable camera, specially designed for the 65+ age group. It features an adjustable elastic strap that allows for a comfortable, firm grip, designed for both left-handed and right-handed use.

FiatVac is a portable vacuum cleaner designed especially for Fiat cars. It features wet or dry vacuum, crevice tool, cord and accessory storage. It is efficient and compact, while it functionally and aesthetically matches the Fiat philosophy.

BLAD (Book Layout and Design) presentation, designed for a contemporary typography design book.

An innovative packaging design for Cormack Packaging Awards, 2007, aimed to improve plastic packaging used for FMCG. This squeezable jam package features a blow-moulded LDPE tube and an injection-moulded snap-on lid with an angled mouth. This solution brings convenience to the manufacturer, retailer and consumer from production to end-use.

d-Frost is a kitchen appliance for easy thawing of frozen food. Based on extensive research of the methods and principles of food thawing, d-Frost offers an efficient defrosting solution in the healthiest way, while using minimal energy.

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"Design is essentially a rational, logical, sequential process intended to solve problems"

25.

JULIA KIM
PROJECT HISTORY

The past four years of studying Industrial Design has trained and shaped me in a lot of ways. Not only did I gain design-based knowledge and skills, through experience, I also learnt to realise the importance of logical thinking and time management. I must say that design studios were intensive and stressful most of the times, but they helped me push my boundaries and take creative approaches towards problems.

Presented are a few of my favourite projects that have interested me the most and therefore are most memorable.

The one shown to the right is a 'Fruit and Veggies Washer' which is an eco-friendly kitchen appliance I designed for the Breville project.

Food preparation such as washing fruits and veggies can take a while and can also affect your water bill, if you, like many other, wash fruit and veggies under running water.

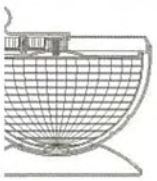
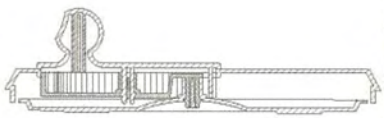
This washer allows you to save time as there's no need to wash fruits and veggies one by one and therefore significantly reduce water usage. First, you place fruits and veggies inside the bowl and fill it with water. Close the lid and spin the handle. The spinning mechanism generates the water to whirl inside the bowl, creating bubbles and waves that hit the surface of the fruits and veggies. After washing and dispensing water, this washer can also act as a salad spinner, drying wet fruits and veggies. The bowl can also rotate and lock into different positions for the user's convenience.

This is an elderly-friendly medicine bottle designed to ensure that elderly patients take their daily dose of medicine. Each time one takes a medicine, he/she should slide the tab. In doing so, it changes in colour from red to green.

The 'Lokit' safety cap is a child-resistant cap which involves certain level of intellectual activity in which children under 5 the age of would find difficult to open, however easy enough for grown-ups.

I have created a corporate branding identity for an imaginary company called 'Ethereal Interiors,' an interior design company that promises to provide with ethereal interior. A dandelion was used as the symbol/ logo for the company to compliment its name and idea.




PART	MATERIAL	DIMENSIONS	MANUFACTURING
Bowl	Stainless steel	283 x 238	Die-casting
Salad basket	Polypropylene		Injection moulding
Lid	Polycarbonate		Injection moulding
Dock	Stainless steel		Die-casting

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Good Design should be soothing to the heart and mind

26.

RENE LAM
PROJECT HISTORY

Shown on the opposite page was my entry for the Breville design competition. The competition's brief was to design an accessory that will remove coffee grounds from the filter holder after extracting an espresso. Emphasis was placed on simplicity and compactness.

Traditionally the method of removing coffee ground is by forcefully hitting the filter holder on to a dedicated coffee bin. However it is noisy and disturbing for domestic use and often can wake up family members in the morning.

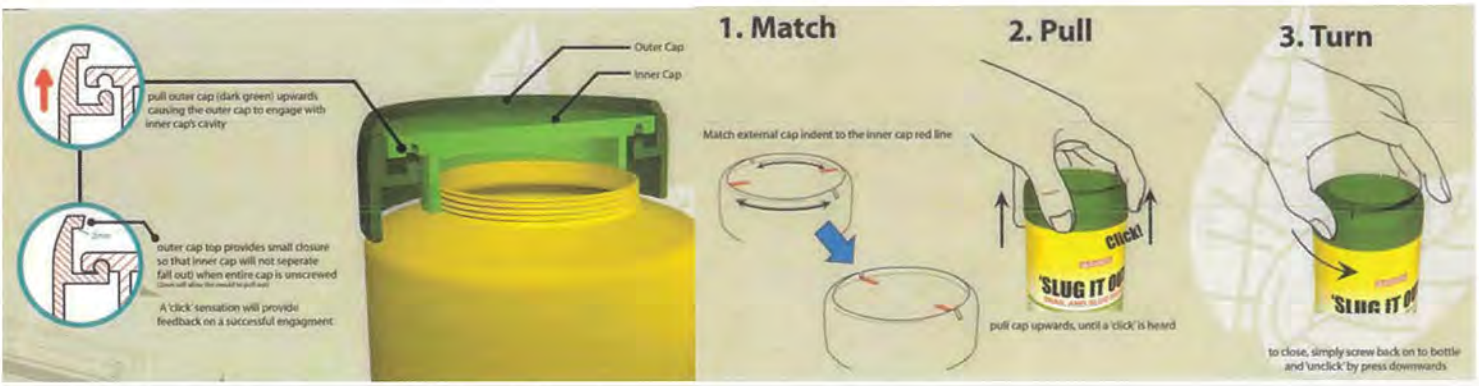
The design is a solution that will eliminate the traditional method of removing coffee ground. By simply using a large tooth like structure inside the bin, as pictured in detail below, it is possible to simply place the filter over the tooth and twist.

The twisting action will break up the coffee ground and eliminate any noise.

Below is another project that was entered into the Cormack packaging competition. This design had made it to the 'selected' round of competition.

The brief required a package that would be child-resistant and ideally a product that would be sold in a hardware store.

The product area I chose was a snail repellent bottle.

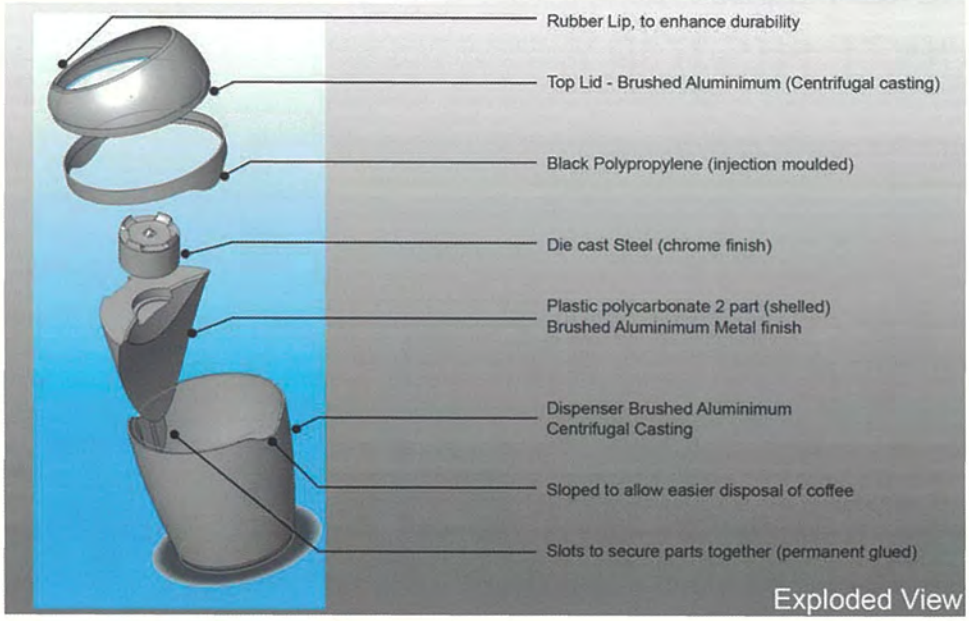


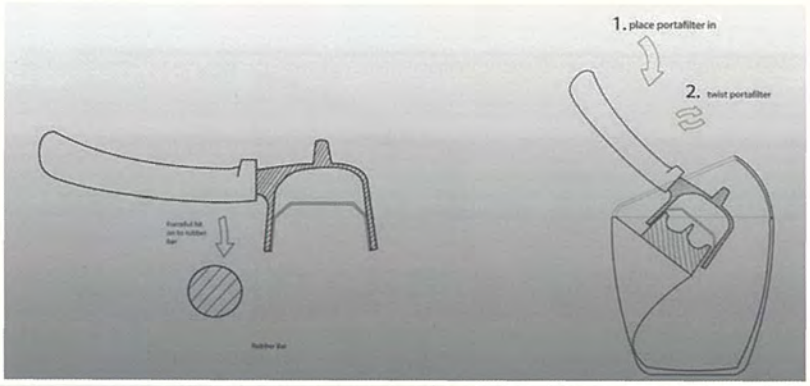
Blitz is new packaging concept featuring a new 'child resistant cap'

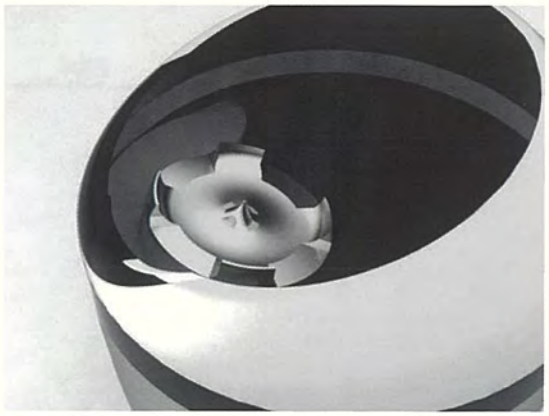
Current packaging in the snail pellets' market is relatively poor in safety. Children can easily get their hands in existing packages, consequences can be fatal.

Blitz is a new packaging concept that attempts to create better child resistant cap.







PART	MATERIAL	DIMENSIONS	MANUFACTURING
Lid (twist cap)	ABS plastic	140 x 200	Assembly line
Bin	Aluminium		Casting
Grinder tooth	Brushed steel finish		Moulding
			Extrusion

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"Try to change the paradigm"

27.

JOANNE LEE
PROJECT HISTORY

During the past four years of studying Industrial Design, I have developed a variety of skills in different areas. It was a valuable time as I've become very strong and confident.

These are some of my design work which I have enjoyed and consider being successful projects that I have completed.

The toaster presented on the right was designed for Breville project. It was designed for single people so they can toast single piece of bread at one time. The way of toasting is different from normal toaster as it has two rollers and two rapid heating ceramic plates at each side of the slot where the toasted bread comes down. The holder on the base holds toast to make you easy to grab it.

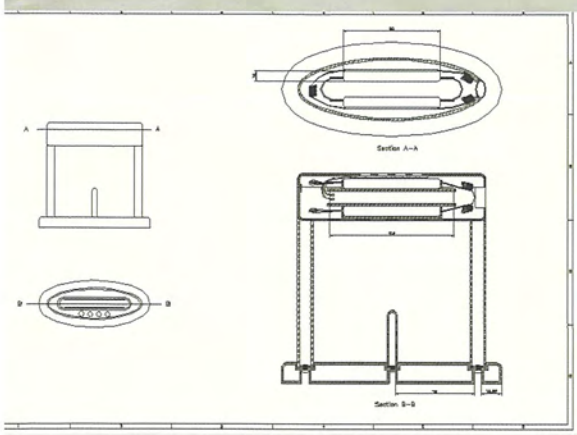
The rapid heating ceramic plate can reduce up to 30% electric energy compare to normal toasters.

The jam bottle is designed to have dual functions which are squeezing and spreading jam on bread directly.

A portable vacuum cleaner which makes you to clean underneath of furniture or corners.

A luxury DAB radio which has LCD touch screen and USB port for Ipod



PART	MATERIAL	DIMENSIONS	MANUFACTURING
Slot	Polycarbonate	210 x 215	Injection moulding
Body	Stainless steel		Die-casting
Base	Polycarbonate		Injecion moulding
Holder	Polycarbonate		Injecion moulding

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"We must never confuse elegance with snobbery."

Yves Saint Laurent, (I.M.O)

28.

PAUL SARPI
PROJECT HISTORY

The Fiat 500 is an iconic symbol of the energetic, passionate and elaborate lifestyle that Italians lead. To accompany this symbol, a zesty vacuum is required. This is a portable vacuum cleaner designed to complement the Fiat 500 and translate the Italian lifestyle into its new Australian market.

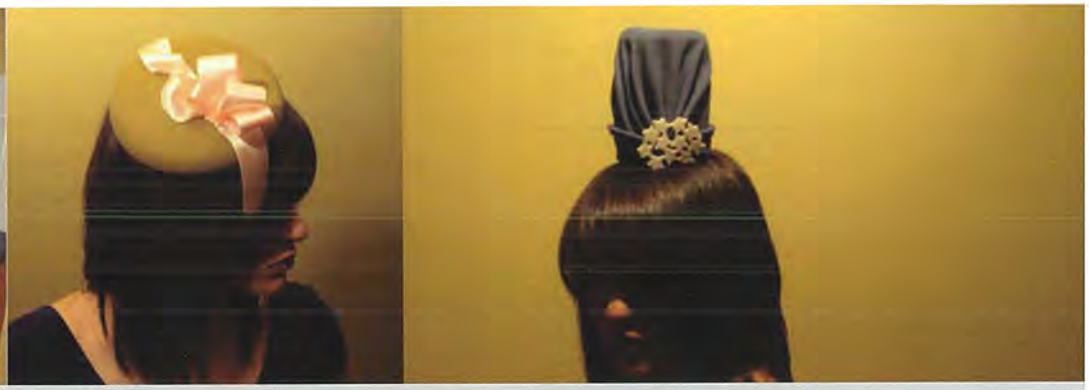
Having a vacuum specifically for the car helps to make it easier to keep the car clean with all the features of the SIPA you need intact. The SIPA car vac is small enough to fit into tight spaces but powerful enough to clean them. At the same time keeping itself tidy and organised.

For the smaller spaces there is a crevice tool that is hidden away under the mouth of the vac. Then a small brush is stored in the back to loosen any stubborn dust. The cord management is concealed by a hytrel insert that is at the back of the vac.

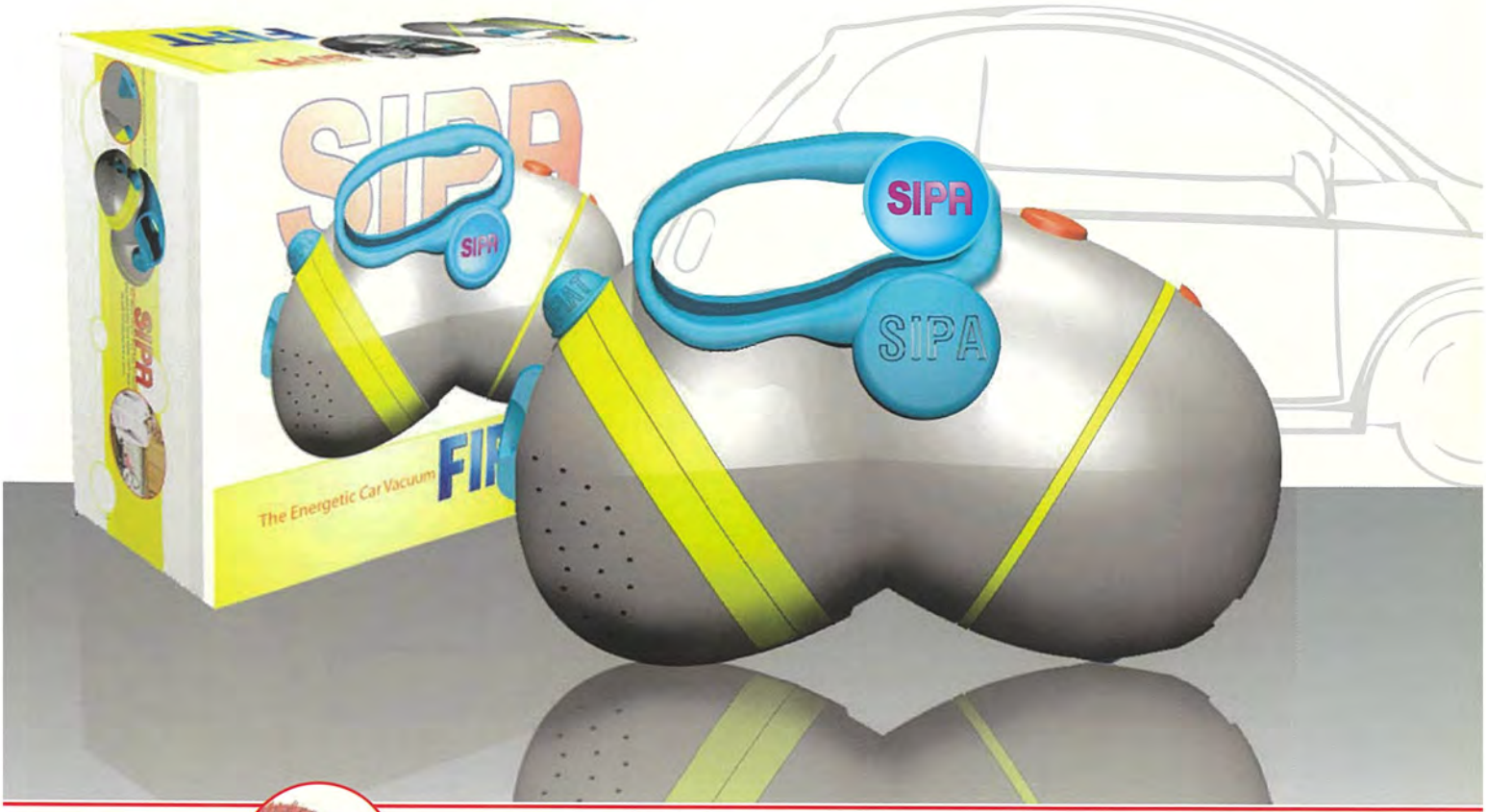
Inspired by both the Fiat image and the recognisable quality handbags of Italy, an energetic and stylish form has been created. This is evident in the use of symmetry and the badge like branding.

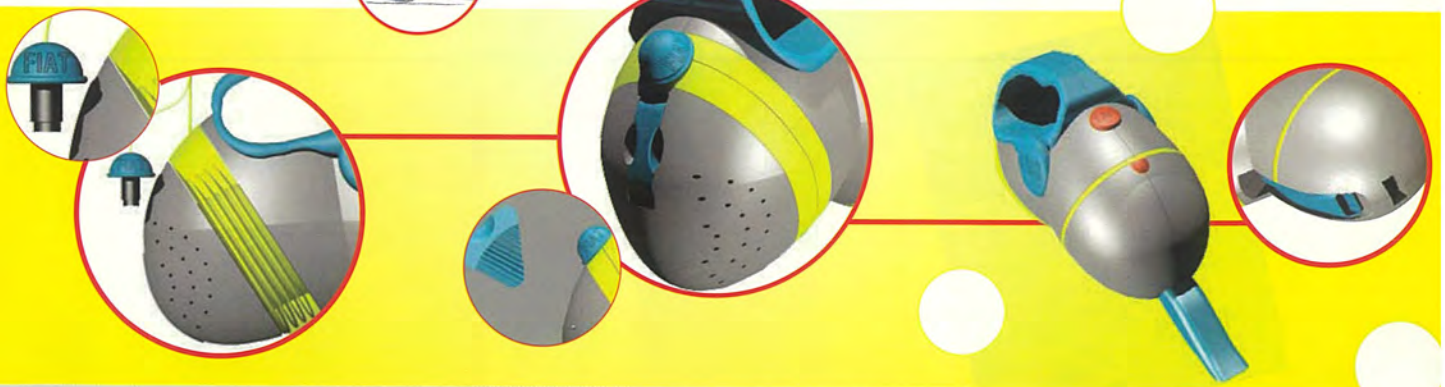
When purchasing the new Fiat 500 you are tasting a piece of the Italian lifestyle. In completing this image the SIPA car vac is essential.

The Piato Pizza Cooker from Breville cooks and reheats pizzas in minutes. Using infrared elements there is an 85% decrease in energy consumption. The pizza not only takes half the time to cook but also creates a crunchy crust while retaining the moisture inside.



These hats are features of the Koukla collection inspired by the work of Frank Gehry. Formed from two part turned blocks and made from steamed felt and ribbon they each relate to a building created by Gehry. The first hat draws from The Marqués de Riscal, Elciego and the second from The Fred and Ginger Building.





PART
SIPA Car Vac

MATERIAL
ABS and PS body
PP rubberised handle
Hytrel rubber insert

DIMENSIONS
265x136x187

MANUFACTURING
Injection moulding
Milling
Extruding
Assembly line

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"simplicity. sustainability. style"

29.

JUSTINE SMITH

PROJECT HISTORY

REHYDR8
BREVILLE FINALIST

The Rehydr8 water filter and chiller has been designed to promote the consumption of filtered tap water rather than bottled water. Over 100 billion disposable water bottles are consumed globally per year. Their transportation, manufacturing and refrigeration contribute greatly to environmental damage, which could be avoided (by most of the world's population), if they consumed water directly from their taps.

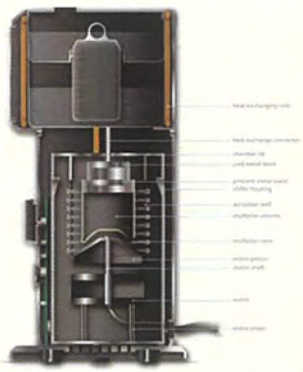
The Rehydr8 water chiller utilises the innovative technology of thermoacoustic refrigeration, which uses sound waves to create pressure and environmentally-friendly gases (Helium or Argon) to create a cool surrounding temperature.

A pair of reusable bottles made from durable & translucent polycarbonate are supplied with the Rehydr8, so you'll always have a chilled bottle of water handy! Each bottle features a built-in (and powerless) thermometer, to display the water's temperature, making it easier to have perfectly chilled water every time.

Thanks to the Rehydr8, you are not only helping protect our environment, but you can also save money in the long term, by drinking filtered water from the tap – there's no need to buy bottled water ever again!

The Rehydr8 comes with two bottles, so you can always have a cold bottle ready to take out with you.

The Rehydr8 sits well on any bench top and does not require any installation, making it perfect for the home or office.



PART	MATERIAL	DIMENSIONS	MANUFACTURING
Water container	Recycled steel	68 x 180	Assembly line
Thermoacoustics assembly	Polycarbonate	230 x146.5 x 293	Folding
Steel outer casing	Silicon rubber		Stamping
Bottle assembly	Thermochromic coated plastic		Injection moulding

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"A good design achieves a goal or purpose. It should inspire and make a difference."

30.

STACEY YAU
PROJECT HISTORY

During my four years of study in the industrial design discipline, I have come across a wide variety of projects, which have helped me develop a broad set of important skills. This not only includes skills in industrial design, but also in visual communication, graphic design, photography and marketing. I have gained a great deal of knowledge and experience that has assisted me in expanding my design strengths, including hand sketching, model making, technical resolution, presentation skills, 3D modelling and rendering as well as graphic design skills.

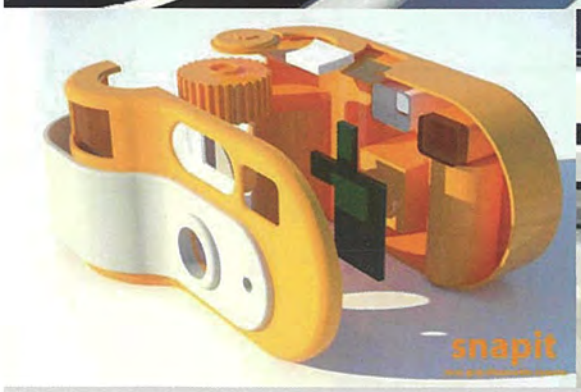
Presented are a few examples of projects that I have produced throughout the course. They illustrate the works that I have greatly enjoyed working on and are most successfully executed. The works exhibited not only include projects created in the design studio, but also projects from multimedia and graphic design.

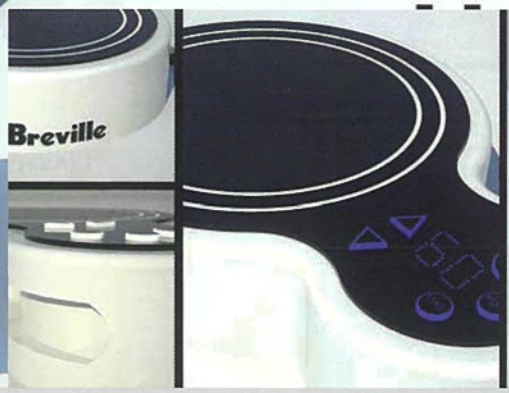
I believe that good designs come from those who are truly passionate and work towards achieving a goal. Only designers with the ability and experience will excel in what they do. Overall, this course has facilitated in setting my design values and perspectives as well as given me valuable experience, so that I can continually improve in the future.

PROJECT 1
This illustration is from an animation project where students were asked to create a detailed multimedia presentation on any subject matter of interest. The topic chosen was 'eco-friendly designs'.

PROJECT 1
This is one of many graphic illustrations, taken from the multimedia presentation. The overall styling was to reinforce an environmentally friendly theme.

PROJECT 2
This is taken from a studio project where students were asked to design a disposable travel camera suitable for people ages 65 and up.





PROJECT 2

As well as the overall styling, students had to demonstrate the internal make up of the disposable camera.

PROJECT 3

This project (same project as main image) was designed in accordance with the Breville 2008 competition and reinforced eco- friendly values.

PROJECT 3

The design is a portable boiler, intended to heat up single cup servings, enabling users to boil the exact amount they need. It is also able to keep warm.

THANK YOU THANK YOU

The Industrial Design class of 2008 would like to extend our thanks to all who have contributed to our development and education throughout our years at The University of New South Wales.

We would particularly like to thank the staff members who made our final project possible:

Oya Demirbilek
Lance Green
Steve Ward
Mariano Ramirez
Miles Park
Rina Bernabei
Andrew Fowkes

We would like to extend a heartfelt thanks to the Studio 4 Supervisors, Miles Park and Andrew Fowkes, for guiding the 2008 cohort through the trials and tribulations of the major project. Due to their tireless professionalism and dedication the outcomes of this year have exceeded expectations.

We would like to recognise the ongoing contribution of our alumni.

We would also like to sincerely thank Peter Kolasinski and Tony Jones from the ID workshop who have helped us prototype the physical models for our major project. Thank you for your patience and time in helping us acquire many skills and achieve our goals.

Many thanks to Rodina Atme for her support and administration help during the course of the Degree.

A special thanks to Sinead Davies for her professional advice and assistance in organising the printing setup.

Dr Oya Demirbilek
Head Of Program

Dr Lance Green
Senior Lecturer

Steve Ward
Senior Lecturer

Miles Park
Senior Lecturer

Andrew Fowkes
Lecturer

Dr Mariano Ramirez
Lecturer

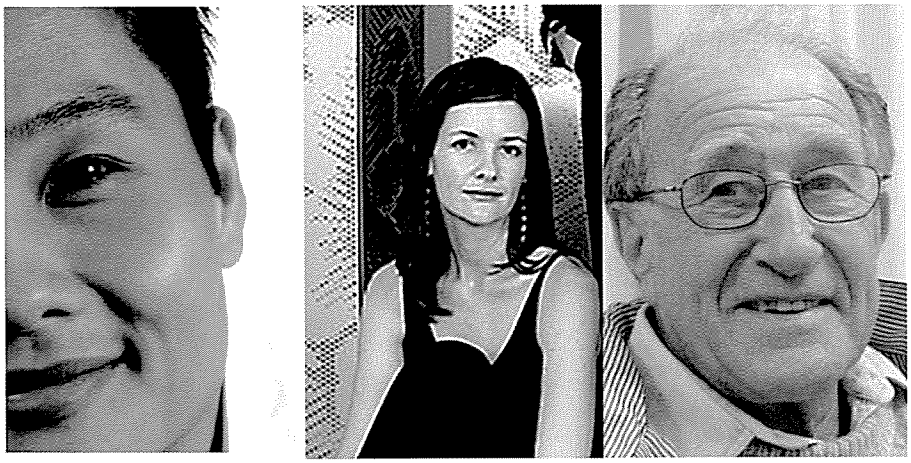
Rina Bernabei
Senior Lecturer

Jonathan Talbot
Senior Lecturer

Bazil Tung
Lecturer

Ruth McDermott
Lecturer

Ken Lam
CAD Lecturer



Brian Ling
Lecturer

Kelly Freeman
Lecturer

Robert White
Lecturer

Peter Kolasinski
Senior Technical Officer

Tony Jones
Laboratory Manager

Rodina Atme
Administrative Assistant

THANK YOU THANK YOU

We would also like to thank the members of IDSOC who contributed to the organisation and execution of the HARVEST exhibtion and catalogue:

President
Anton Grimes

Vice President
Josh Bladwell

Treasurer
Justine Smith

Secretary
Min Kong

ARC Clubs Representative
Stafford Van Putten

Sponsorship Director
Ken Seeto

Fundraising Director
Angeline Meloche

Exhibition Director
Eugene Cheong

Catalogue Director
Roy Hareguna

Social Director
Will Wansey

SPECIAL THANKS SPECIAL THANKS

We would like to give special thanks to the following people. Without their help this catalogue and exhibition would not have been possible.

Andrew Fowkes
For everything – coordinating the fundraising for the exhibition, organising sponsorship and keeping things together and making sure everything runs smoothly.

Rodina Atme
For her support and assistance with the administration of the exhibition and catalogue.

Peter Kolasinski and Tony Jones
For their help and assistance with modelling making and producing prototypes in the workshop.

Anton Grimes
For his organisational work with fundraising and maintaining his responsibilities as the IDSOC president.

Catalogue Team
A very big thank you to the catalogue team especially Roy Hareguna for your effort in organising and putting together the catalogue.

COURSE OUTLINE COURSE OUTLINE

YEAR ONE

Semester 1

IDES1012 Safe Workshop Practices (3 UOC)
IDES1101 Industrial Design Fundamentals (6 UOC)
IDES1121 History of Industrial Design (3 UOC)
IDES1161 Ind Design Communication A (6 UOC)
MATH1011 Fundamentals of Mathematics B (6 UOC)

Semester 2

IDES1031 Design Studio 1 (6 UOC)
IDES1071 Mat & Tech Workshop A (6 UOC)
IDES1162 Ind Design Communication B (6 UOC)
MATH1041 Stats for Life & Soc Sciences (6 UOC)

YEAR TWO

Semester 1

IDES2161 Industrial Design Studio 2A (6 UOC)
IDES2163 Ind Design Communication C (6 UOC)
IDES2201 Ergonomics (6 UOC)
MARK1012 Marketing Fundamentals (6 UOC)

Semester 2

IDES2072 Mat & Tech Workshop B (6 UOC)
IDES2092 Ind Design Theory and Process (6 UOC)
IDES2162 Industrial Design Studio 2B (6 UOC)
IDES2171 Computer Application Ind Desgn (6 UOC)

YEAR THREE

Semester 1

IDES3073 Mat & Tech Workshop C (6 UOC)
IDES3221 Industrial Design Studio 3A (6 UOC)
MARK2051 Consumer Behaviour (6 UOC)
MARK2052 Marketing Research (6 UOC)

Semester 2

IDES3222 Industrial Design Studio 3B (6 UOC)
Electives (totalling 12 UOC)
General Education (totalling 6 UOC)

YEAR FOUR

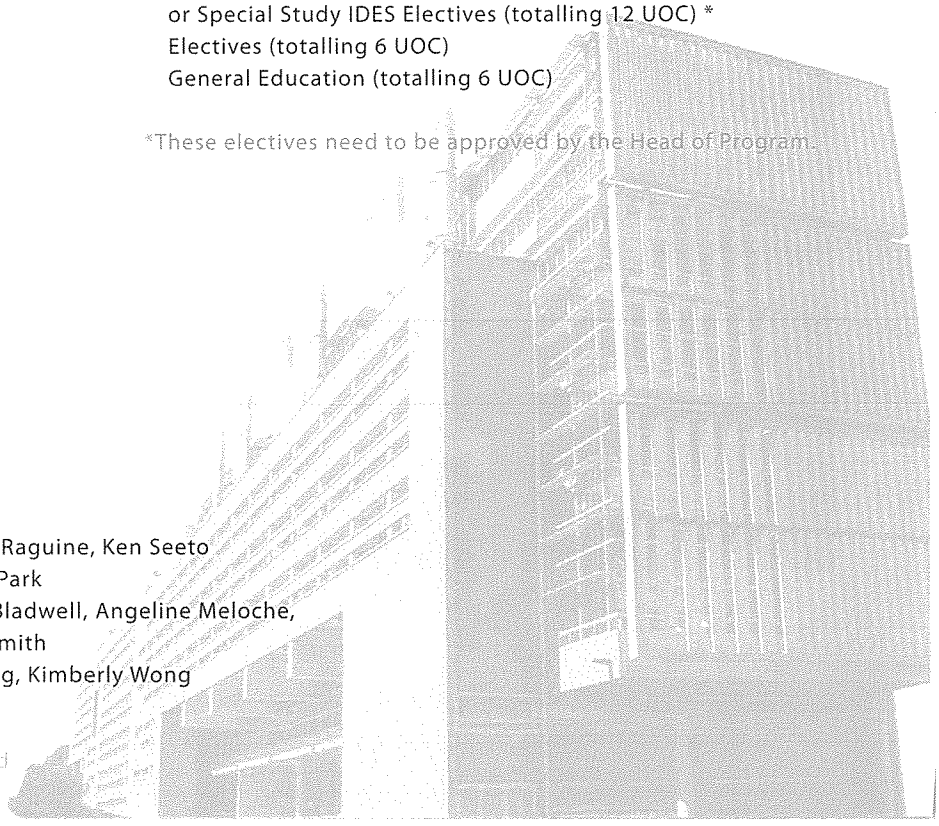
Semester 1

IDES4291 Industrial Design Studio 4 (6 UOC)
IDES4301 Project Research (6 UOC)
IDES4372 Ind Desgn Mang and Practice (6 UOC)
Electives (totalling 6 UOC)

Semester 2

IDES4352 Industrial Design Project (12 UOC)
or Special Study IDES Electives (totalling 12 UOC) *
Electives (totalling 6 UOC)
General Education (totalling 6 UOC)

*These electives need to be approved by the Head of Program.



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Art Direction: Andrew Fowkes
Non-contributors: Everyone else not listed

harvest

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