



University of HUDDERSFIELD

University of Huddersfield Repository

Stockton, Glynn

University Industry Collaboration: Research and enterprise activity within University of Huddersfield Product Design courses.

Original Citation

Stockton, Glynn (2014) University Industry Collaboration: Research and enterprise activity within University of Huddersfield Product Design courses. In: Packaging Innovation: Making it Happen for your Brand, 26th November 2014, Thinktank Science Museum, Birmingham, UK.

This version is available at <http://eprints.hud.ac.uk/id/eprint/22912/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

University and Industry Collaboration

Research and enterprise activity within
University of Huddersfield
Product Design courses

Glynn Stockton BSc (HONS) PGCE PGDip MSc FHEA

Research Team:

Dr Ertu Unver BSc MSc PhD PgCert FHEA AIED

Dr David Swann MDes PhD FRSA FHEA

Students:

In Module (Year 2)

Placement Year

Final Year Major Project

KTP

Post-graduation

Staff:

Research

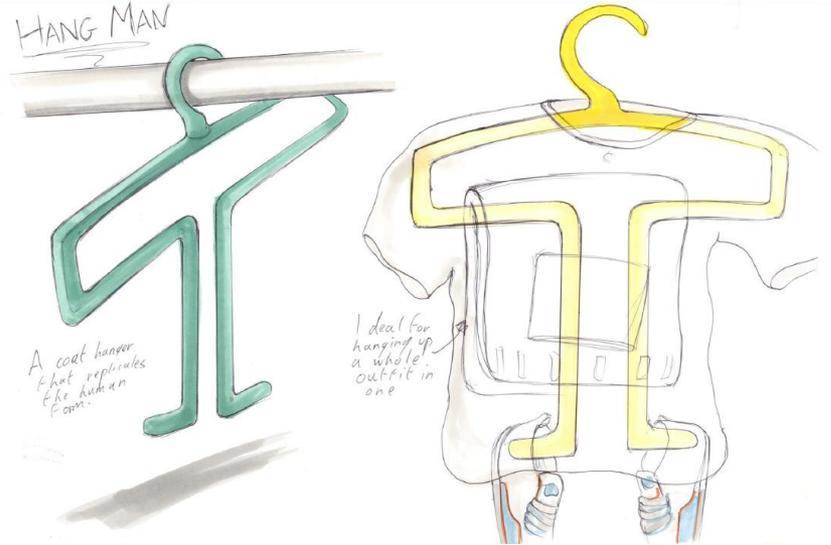
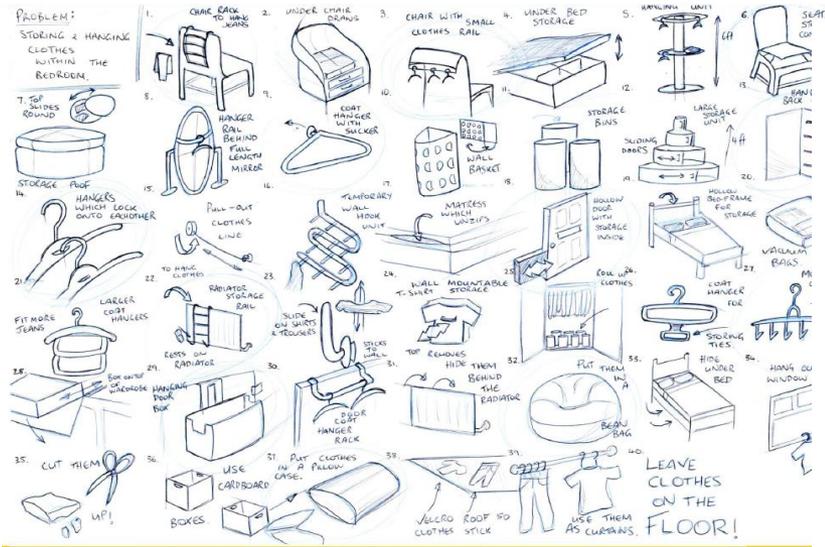
Design

Facilities

Students: In Module (Year 2)



wilkinson

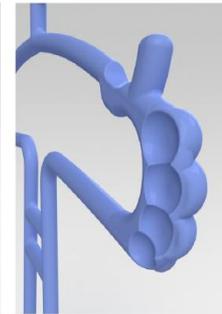
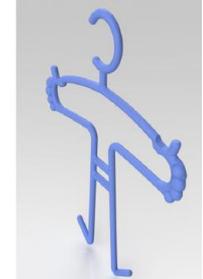
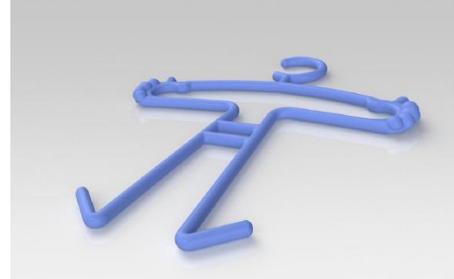
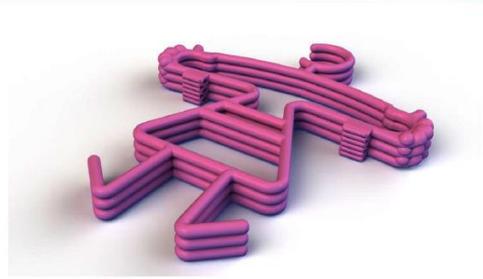
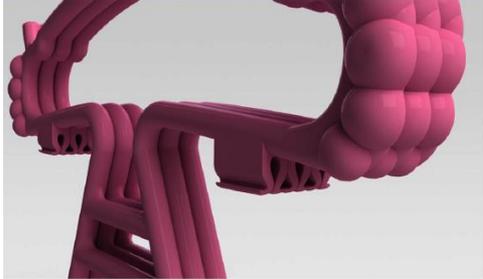
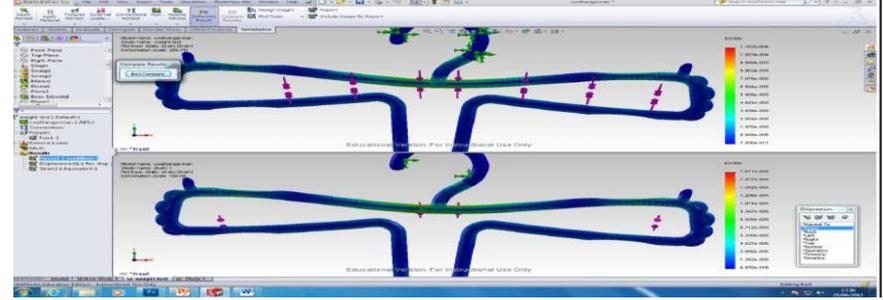


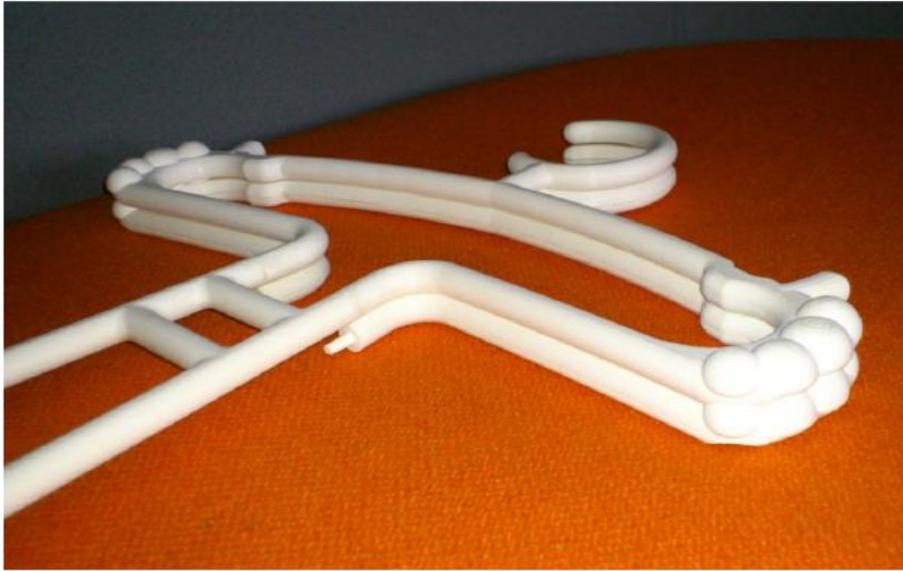
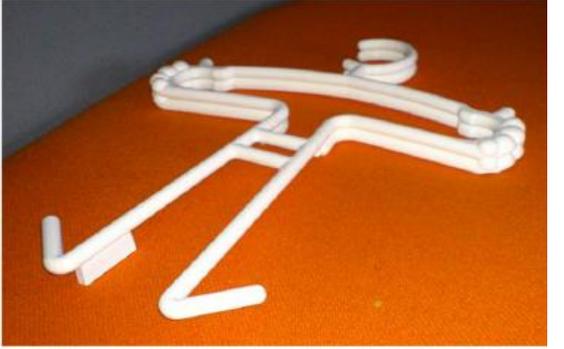
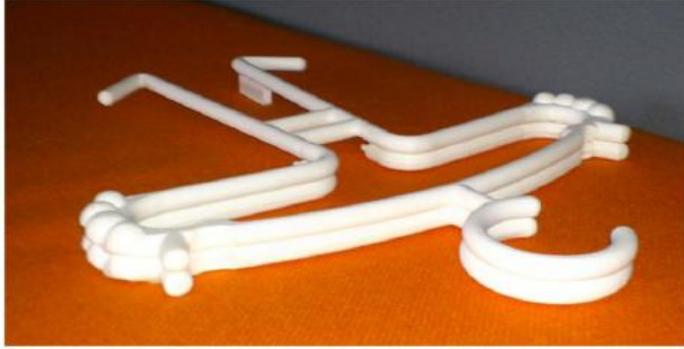
wilkinson

Concept 6- Hangman



- Unique Design
- Can Hold and entire outfit
- Injection moulded body so cheap to produce
- Comes in a pack of 3
- Aimed at a younger/ family market
- Practical yet novelty design







Will be a simple, single piece of card with two holes cut so that it can fold over the product as a collar. This keeps it cheap to package and doesn't add any recycling issues. The graphics will be clear showing the HangMan logo with the brand name above and a brief description of the product. On the back will have the bar code and a larger description.

[Shop By Department](#) ▼[Shop By Room](#) ▼[Shop Deals](#)[Student Life Sorted](#)[FREE HOME DELIVERY ON £80 SPEND](#)[FREE STORE DELIVERY](#)[WILKO LIFE BLOG](#)[EMAIL SIGNUP](#)

[Home](#) / [Housewares](#) / [Laundry](#) / [Garment Hangers](#) / [Wilko Outfit Hangers Girls Pink x 3](#)



Wilko Outfit Hangers Girls Pink x 3

£4.00

(6) In stock and ready to ship

1 Quantity

[ADD TO BASKET](#)



catalogue No: 0334028



[Write the first review](#)

[Follow this product](#)

[Description](#)

[Specification](#)

[Delivery & Returns](#)

The ingenious Wilko Girls Outfit Hangers come in a pack of three and are ideal for dressing up, wedding outfits and school uniforms. Each complete-outfit hanger holds four items – a shirt, a skirt, a tie and a pair of socks. Get organised the night before and make your mornings easier!

[click to zoom](#) +



0

Students: Placement Year



Students: Final Year Major Project

1



2



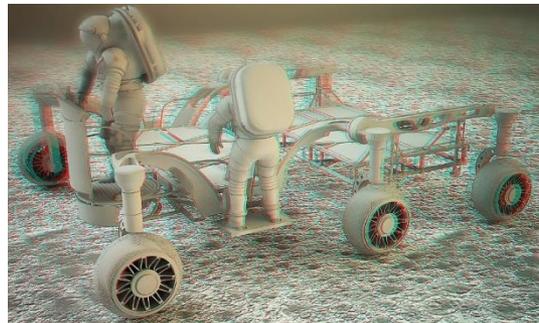
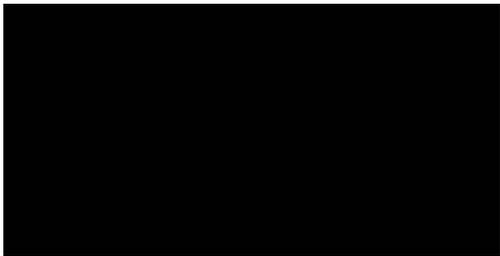
3



4



Students: Final Year Major Project



Product Design

Transport Design

Postgraduate, MA 3DD, MA by Research , PhD

3D Digital Design:

3D character and costume design



MA Postgraduate Dan Hughes –McGrail portrayal of Sir Patrick Stewart as Elizabethan Francis Bacon.

Students: Post-graduation



Left to right : Adam Barnes, Transport Design BA(Hons), 2008. Cephas Howard, Creative Imaging BA(Hons), Tim Ainley, Product Design BA(Hons), 2005. Michael Fuller, Product Design BSc(Hons), 2009. Stewart Whitehead, Product Design with Animation BA(Hons), 2008.



"We only recruit the most talented graduates and benefit from their high level of design skill and knowledge of the latest techniques – new ways of brainstorming, visualising concept and approaching challenge."

Mike Ganderton, Creative Director LEGO



Marcus Hartley
Design Engineer
Dyson

3D Digital Design MA Master Huddersfield University UK

Glynn Stockton
Edit Profile

News Feed
Messages 9
Events 1

APPS
Games
Pokes
Photos
toGather
Gifts
Saved
Music
Games Feed 20+

3D Digital Design MA Master Huddersfield University UK Members Photos Search this group

Join this group to post and comment. [+ Join group](#)

ABOUT 112 members
Public Group
<http://library.hud.ac.uk/summon/>
who: Industrial, Transport, Product, Automotive Design, inter... [See More](#)

CREATE NEW GROUPS
Groups Chat (Off)

GROUPS
NW Blood Bikes L... 20+
Canon Slade MTB 9
manchester critica... 20+
Manage Your Groups

PINNED POST
Ertu Grul Unver
25 March - Edited
This group is dedicated to current, past and future students of MA 3D

Students: Post-graduation – KTP

Knowledge Transfer Partnership

Knowledge Transfer Partnerships

Database Search | New User Registration | Existing User Entry

Search Site:

[Home](#) | [Business](#) | [Academics](#) | [Graduate](#) | [Resources](#) | [Sponsors](#) | [Contact us](#)

Current KTP Vacancies: Polymer Gear Desing Engineer

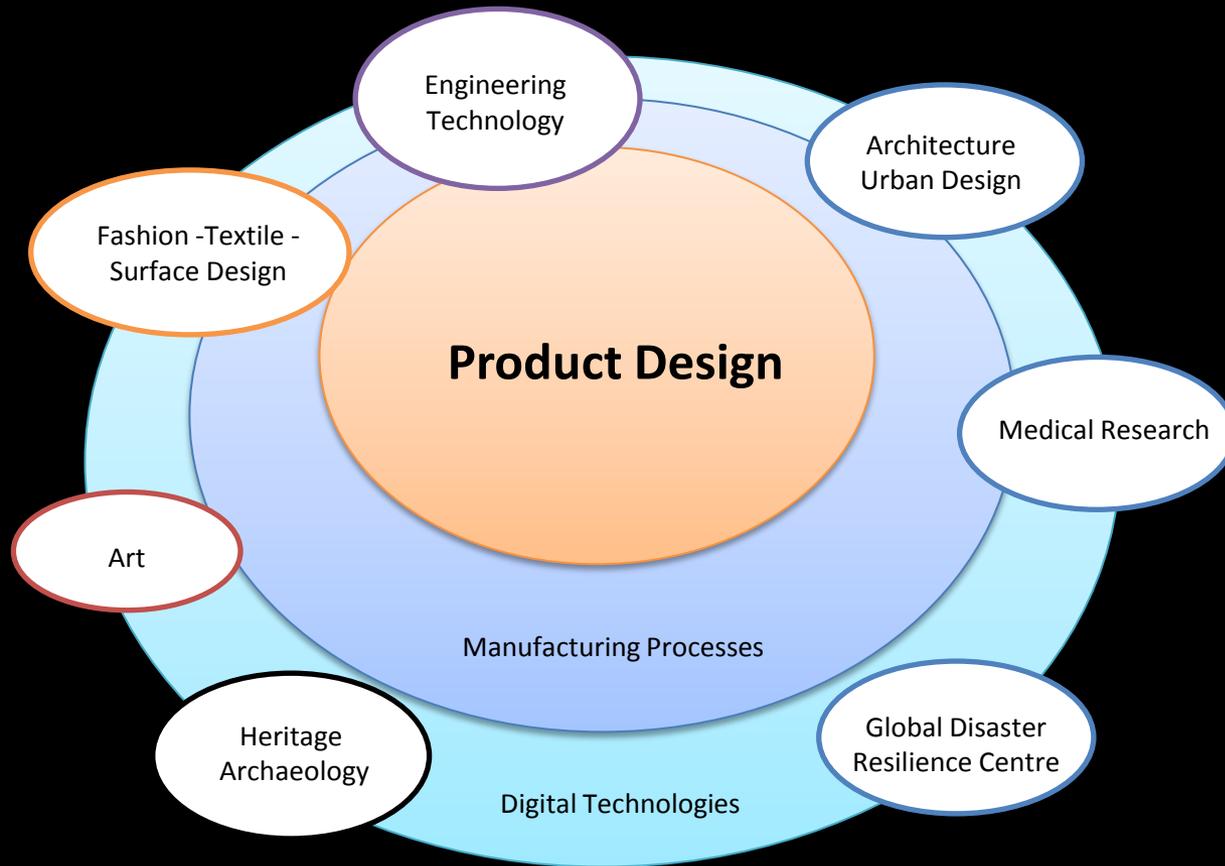
Graduate vacancies with a difference

Classic KTP Vacancy Advertisements

RSS Feed:  | [What is RSS?](#)

Area	Info	Salary	Closing date	
East of England	KTP Associate (Embedded Systems Engineer)	£23,500 - £27,000	27/11/2014	Info (2836)
East of England	Polymer Gear Desing Engineer	£22,000 - £28,500 per annum	28/11/2014	Info (2840)
East of England	KTP ASSOCIATE - ULTRA THIN FILMS USING ATOMIC LAYER DEPOSITION (ALD)	£25,000 - £28,300 pa	15/12/2014	Info (2850)
North East of England	Mechanical / Manufacturing Engineering vacancy to develop bespoke manufacturing platform	£21,000 - £24,000 per annum	26/11/2014	Info (2833)
North East of England	Business Behaviour Analyst (KTP Associate)	£24,057	09/12/2014	Info (2799)
North West of England	DEMENTIA COMMUNICATIONS FACILITATOR	£23,870-£25,451	12/12/2014	Info (2847)
North West of England	SOCIAL DATA SCIENTIST	£21,170 - £21,960	12/12/2014	Info (2855)
Scotland	Senior Data Scientist - KTP Associate	£32-36000 pa	27/11/2014	Info (2817)
Scotland	KTP Associate	£24,000	30/11/2014	Info (2859)
Scotland	KTP Associate - Information and Records Management	£21,000-£25,000	01/12/2014	Info (2837)
Scotland	KTP Associate - Business Development Officer	£25,000 - £27,000	01/12/2014	Info (2848)

Staff: Research

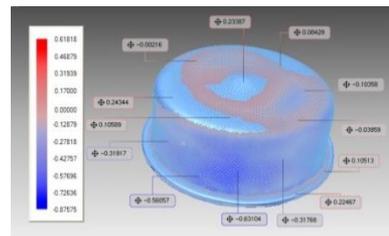
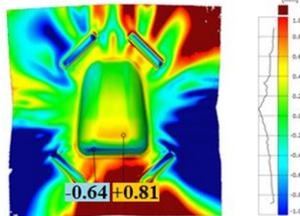
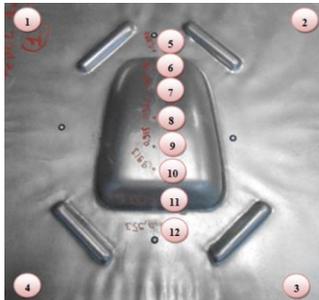
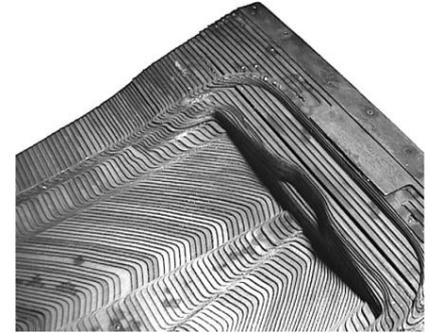
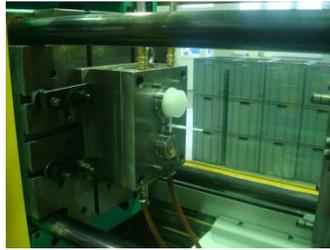
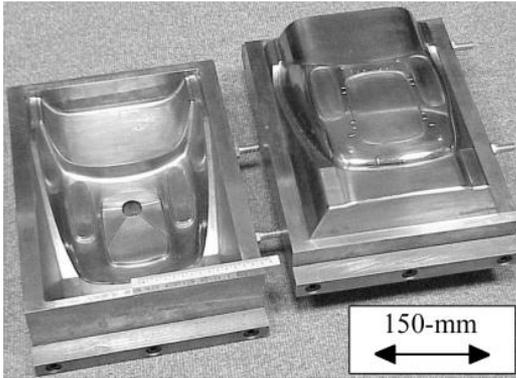


Enterprise and Research activities : Staff

To challenge this, Paxman engaged the expertise of researchers at two of the University of Huddersfield's academic schools. Initially funded by an Innovation Voucher from Kirklees Council, Paxman started working with the School of Applied Sciences, using its cutting-edge cell biology techniques to help identify the mechanisms that govern patients' variable responses to scalp cooling. Following additional funding from [Knowledge Transfer Partnership](#) (KTP) and [Technology Strategy Board](#) (TSB) grants and from the Collaborative Ventures Fund at the University, the School of Art, Design and Architecture then joined the team to investigate the design of the scalp cooling ca



Low Cost Tooling for Product Design(ers) (2012)



Staff: Design



ABC Syringe
Dr. David Swann

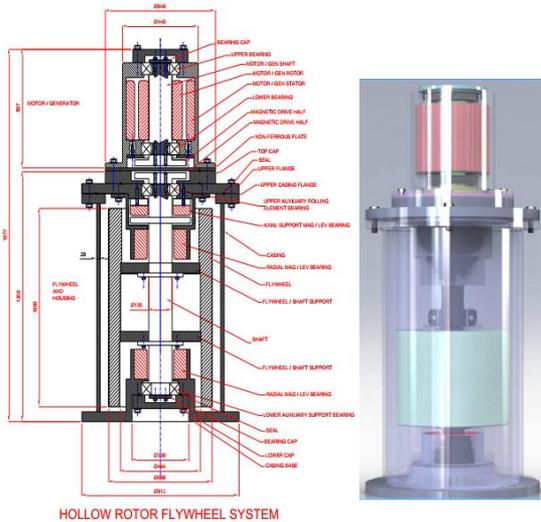


Brittanic Watch
Rob Silkstone

Organ Care System
Glynn Stockton



Enterprise activities



Kinetic Energy Storage Device, ESP Ltd



Blister pack opener:



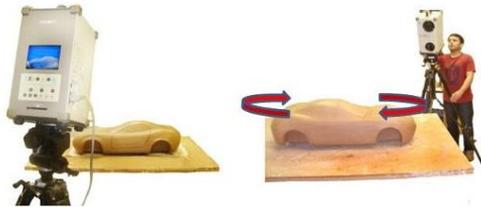
Bob the Builder Tractor : Mackinnon & Saunders



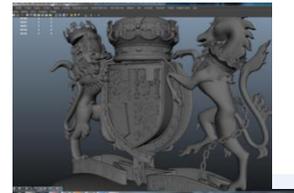
Paxman Cap



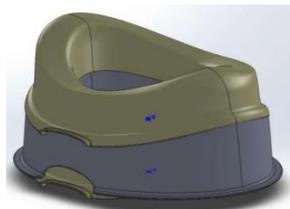
Royal Coat of Arms, 3M Buckley



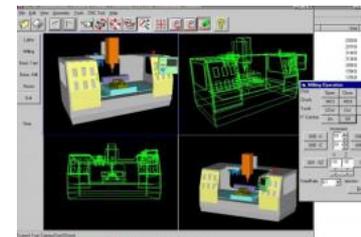
3D Scanning: Mackinnon & Saunders



Wheelie Bin Lock: JA innovation



Portable Potty: Simple Little Creations Ltd

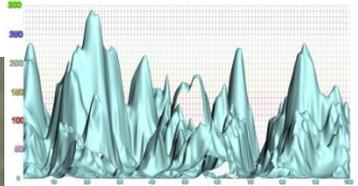
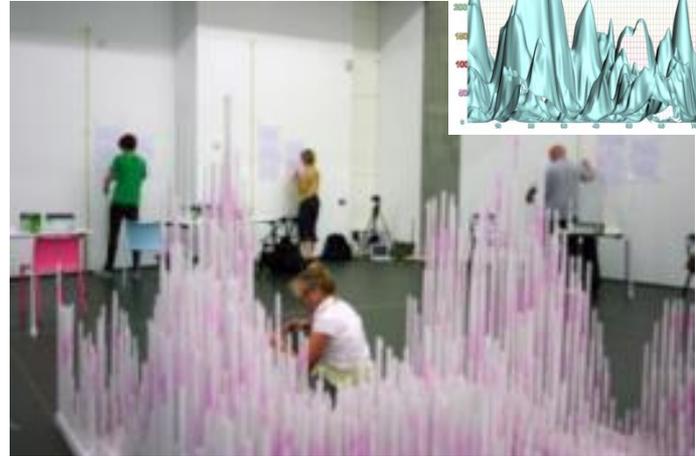


CNC Learning Software: Kirklees College

Interdisciplinary & International Impact



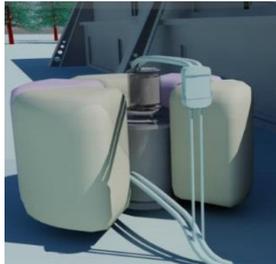
Rupert Till-Heritage, Music



Jill Townsley, Art



Business L'Oreal



Engineering



Costume

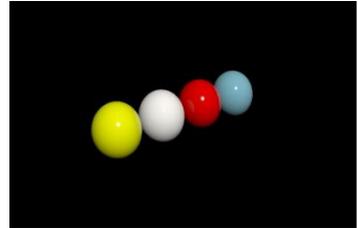


Digital Doubles



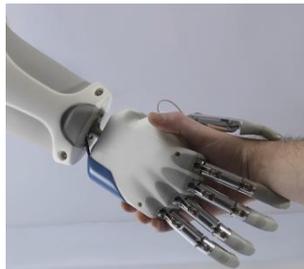
Prof Bromley & Prof Ball

International



Current & Future Projects planned:

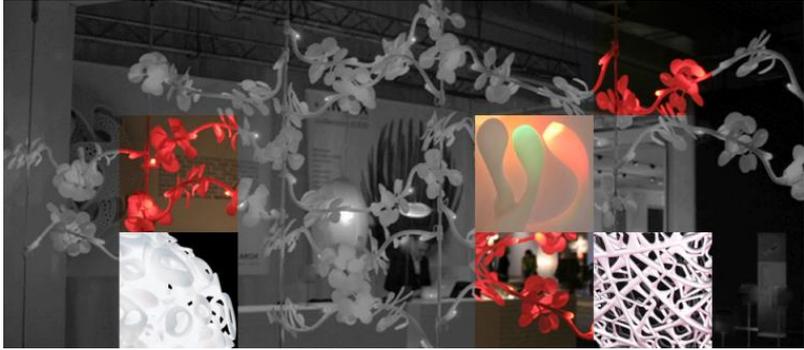
- **UNICEF Innovation Lab:** portfolio of high impact products
- **Erasmus+:** design methodologies for prosthetic design using RP technologies
- **Others:** Acoustic products to reduce noise; Working prototypes of animatronics mechanical characters; Low melting alloy for forming sheets metals; Novel tooling methods for manufacturing low volume products, application of 3D Printing for tooling, Algorithmic 3D Modelling and visual programming such as using Grasshopper for exploring new shapes.



Staff: Facilities

3D PRINTING @ SCHOOL OF ART, DESIGN AND ARCHITECTURE:

Students and research project from 2003 onwards. Including the **Future Factories** Project in 2003, at ADA, University of Huddersfield where to research the direct digital awareness manufacture of randomly generated and consumer controlled 3D models. This led to the “Automake Project” in collaboration with Sheffield Hallam and Falmouth Universities. Product/Transport students at Huddersfield used 3D printing for design realisation.



"Buzz" the Buzzle Bank

"Buzz the Buzzle Bank" is a coin and tin bank designed to encourage recycling by getting children involved with the process at an early age. Its built in puzzle and coin crusher aim to make the process more fun and make recycling a habit in later life.

Installed in playgrounds of primary schools.

Complements National Curriculum teaching of green issues.

Child collecting tins and cans at home could increase parental awareness of recycling.

GreenClean



3M Buckley Innovation Centre



3D Printers at University of Huddersfield: 3M Business Innovation Centre

3M Business Innovation Centre has EOS FORMIGA P 110

Laser Sintering Machine cost around £200k,
Similar Machines for metal sintering cost over £500k

A wide range of materials are available:

(PA 2200, PA 2201, PA 3200 GF, PrimeCast 101 & PA 2105)

Design for low-dust, ergonomic work conditions

Layer thickness (depending on material): 0.06 mm, 0.1 mm, 0.12 mm

Effective building volume: 200 mm x 250 mm x 330 mm

Building speed (depending on material): up to 20 mm/h

Laser type : CO₂, 30 W

Power consumption : 2 kW

Requires Compressed air supply and integrated Nitrogen generator

**BIC offering free 1 day 3D printing and modelling services
for local businesses through 2014 !**

Contact Susan Lipthorpe at 3D BIC



www.

hud

.ac.uk

www.

huddersfield3d

.co.uk

References:

- Taylor , Andrew, Unver, Ertu, Armstrong , Barry, Ward, Geoff, Agnew, Alison, Hughes-McGrail, Daniel and Argyrou , argyroulla (2013) [3D digital technologies: Sculpting, modelling & construction of patterns for costume & clothing.](#) In: The First International Symposium for Creative Pattern Cutting, 6th - 7th February 2013, University of Huddersfield.
- Unver, Ertu and Taylor, Andrew (2012) [Virtual Stonehenge Reconstruction.](#) In: Progress in Cultural Heritage Preservation. Proceedings: Lecture Notes in Computer Science Subseries: Information Systems and Applications, incl. Internet/Web, and HCI , 7616 (XXV). Springer, pp. 449-460. ISBN 978-3-642-34234-9
- Taylor, Andrew and Unver, Ertu (2012) [Biomimetic radiolarian lamp prototypes](#)
- Dean, Lionel Theodore, Unver, Ertu, Campbell, Ian and De Beer, Deon (2012) [Making it real: virtual tools in 3D creative practice.](#) In: Making: an International Conference on Materiality and Knowledge. Book of Abstracts . NordFo, Nordic Research Network, Notodden, Norway, p. 76
- Taylor, Andrew and Unver, Ertu (2012) [Practice based 3D surface design research: Zooplankton Lamp & Particle fluid lamp.](#) In: Surface Design Show 2012, February 7-9 2012, Business Design Centre, Islington. London
- Unver, Ertu and Dean, Lionel Theodore (2011) [Droplet Lamp Design exhibition](#)
- Taylor, Andrew, Harris, Joanne, Unver, Ertu and Lewis, Linda (2011) [Exhibition of materials thinking and research: Digital 3D Modelling & Additive Prototypes of Surface Materials](#)
- Kus, Abdil, Unver, Ertu and Taylor, Andrew (2009) [A comparative study of 3D scanning in engineering, product and transport design and fashion design education.](#) Computer Applications in Engineering Education, 17 (3). pp. 263-271.
- Unver, Ertu, Taylor, Andrew and Hughes, Daniel (2010) [Poster Paper: Editable Artefact: Stonehenge Megalithic Puzzle Project.](#) In: University of Huddersfield Research Festival 2010 , 8-18 March 2010
- Unver, Ertu (2006) [Strategies for the transition to CAD based 3D design education.](#) Computer-Aided Design and Applications, 3 (1-4). pp. 323-330. ISSN 1686-4360
- Unver, Ertu, Atkinson, Paul and Tancock, Dave (2006) [Applying 3D scanning and modeling in transport design education.](#) Journal of Computer-Aided Design and Applications, 3 (1-4). pp. 41-48. ISSN 1686-4360

References:

Unver, Ertu, Howard, Chris, Swann, David and Stockton, Glynn (2013) [Design, development and prototyping of portable Potty as part of Petit en Suite Child's Pop-up Privacy Room.](#) Project Report. University of Huddersfield, Huddersfield, UK

Unver, Ertu (2013) [Design and Development of a new Scalp Cooling Cap - Stage 1 : Confidential Design and Development Report.](#) Project Report. Confidential Report Submitted to Paxman Coolers Ltd

Taylor, Andrew and Unver, Ertu (2014) [3D Printing- Media Hype or Manufacturing Reality: Textiles Surface Fashion Product Architecture.](#) In: Textiles Society Lecture , 17th February 2014, Textile Centre of Excellence, Huddersfield UK

Unver, Ertu, Swann, David, Bailey, Rowan, Govindarajan, Iniyanrajan and Dollan, Fiona (2013) [The Art of 3D Sculpted Printing : Royal Coat of Arms Case Study.](#)

Unver, Ertu (2013) [Can 3D Printing change your business?](#) In: CKMA Calderdale and Kirklees Manufacturing Alliance Meeting , 11th April 2013, 3M Buckley Centre, Huddersfield.

Taylor , Andrew, Unver, Ertu, Armstrong , Barry, Ward, Geoff, Agnew, Alison, Hughes-McGrail, Daniel and Argyrou , argyroulla (2013) [3D digital technologies: Sculpting, modelling & construction of patterns for costume & clothing.](#) In: The First International Symposium for Creative Pattern Cutting, 6th - 7th February 2013, University of Huddersfield

Unver, Ertu and Taylor, Andrew (2012) [Virtual Stonehenge Reconstruction.](#) In: Progress in Cultural Heritage Preservation. Proceedings: Lecture Notes in Computer Science Subseries: Information Systems and Applications, incl. Internet/Web, and HCI , 7616 (XXV). Springer, pp. 449-460. ISBN 978-3-642-34234-9

Armstrong , Barry, Unver, Ertu and Taylor, Andrew (2012) [Sketching in digital clay: Digital sculpture for costume design visualization.](#) In: DRN Drawing Research Network conference 2012, 10-11 September 2012, School of the Arts/Loughborough Design School, Loughborough University.

Johnson, Anthony and Unver, Ertu (2011) [The Conceptual Design of a Kinetic Energy Storage Device to Store 20 KWh of Energy.](#) Research Report. University of Huddersfield Confidential Feasibility Report, Huddersfield, UK

Unver, Ertu (2006) [Strategies for the transition to CAD based 3D design education.](#) Computer-Aided Design and Applications, 3 (1-4). pp. 323-330. ISSN 1686-4360

Unver, Ertu, Atkinson, Paul and Tancock, Dave (2006) [Applying 3D scanning and modeling in transport design education.](#) Journal of Computer-Aided Design and Applications, 3 (1-4). pp. 41-48. ISSN 1686-4360