

















**IMAGINEERS** 2016



# YOU ARE INVITED!

3rd and 4th Year Degree Show

**MEng Design and Innovation** 

Queen Mary & Goldsmith's College, University of London

**BEng Materials and Design** 

Queen Mary, University of London

BSc (Eng) Multimedia and Arts Technology

Queen Mary, University of London

# **Dates**

Wednesday 15th June

Private Viewing 5pm - 9pm

Thursday 16th June

General Public | 10am - 6pm

Friday 17th June

General Public | 10am - 6pm

# Jake Hall

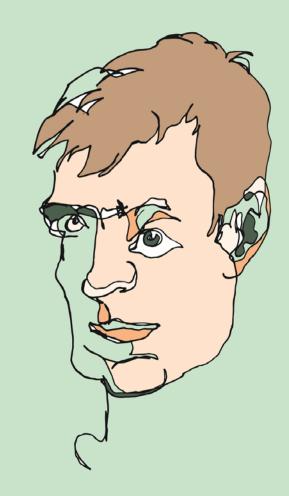
#### 4th Year - MEng Design and Innovation

Interests: Industrial design, technology, architecture / micro architecture, landscape design, sport.

Ambitions: Would like a job that involves a lot of the physical making and fabrication of ideas.

# Cyclean

A human powered washing machine for use in refugee camps and developing countries. The project utilises broken or unwanted washing machines that would otherwise be getting sent to landfill. They are then adapted to rely only on the power of humans, with the intention of being donated to areas that don't necessarily have access to electricity.



# Ellie Moss

4th Year - MEng Design and Innovation

Interests: repairing and renovating my canal boat, sustainable design, making.

# Shift

Space is becoming more valuable and less available, especially for young people, whose lifestyles are becoming more nomadic. The furniture we choose needs to make the most of the space available. Shift is a multifunctional and extendable sofa that provides a flexible solution for modern living.



# Lucas Stockman

4th Year - MEng Design and Innovation

Technology lover,

Future mad scientist.

# **Tension**

Universal tension poles for attachment of shelving and other amenities without the need for drilling or screws. Tension poles can be used in combination to create structures to the customers desire!



# **Goodness Victor**

4th Year - MEng Design and Innovation

I am a thinker.

I spend a lot of time within my own thoughts, as most innovators do.

I think design and innovation are powerful tools that can change lives.

Interests: Digital design, Service design, UX/UI, Visual Design

# Hush

Hypermobility on the surface is glamorous. However research shows that there are adverse on health and wellbeing from frequent travel.

Hush is a digital application and service design that curates leisure and wellbeing time for millennial business travellers.



# Tom Jolly

#### 3rd Year - MEng Materials and Design

Enthusiastic problem solver and creative thinker.

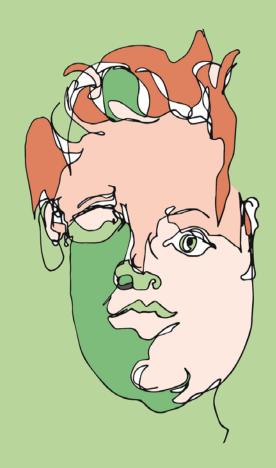
Interests: travel, sport, photography, making, sustainability

Future: Be involved with a variety of creative projects and developing innovative design solutions.

### Femoral Stem Taper Protector

Modular hip replacements give surgeons the ability to customise the size and materials of implants to fit the patient's needs. However, the taper system employed to join the femoral stem and head together can be compromised if any bodily fluid or debris (from before and during surgery) contaminates the taper surface prior to assembly.

A packaging solution has been developed which enables surgeons to implement trialling of the femoral head and assembly with the definitive head without exposing the taper surface. The device can then be removed safely and disposed of.



# Billie Moore

#### 3rd Year - BEng Materials & Design

A global designer and problem solver, Team Leader

Interests: 3D Printing, Discovering, Future Technology, spontaneity, technical creativity, Making

Future: Hope to complete a Design Masters in Japan
Get involved in amazing design projects

### **DePuy Trunnion Trialling**

Femoral trunnion junction of hip replacement is of great interest to surgeons, current research studies have developed understanding of the failure mechanisms of the interface between femoral neck & head of patient's artificial joints, with surgical techniques a large contributing to failure.

Project Design concept trunnion cover for use key surgical stages of insertion and trialling, allow surgeons to be hands on and unconsciously improve surgical practise. Overall improvement in longevity & surgeons reputation.



# Jon Williams

#### 3<sup>rd</sup> Year - MEng Materials & Design

Interests: Creating, Interaction, Experience, Art, Graphic Design, Technology, Sport.

Future: Hope to always be learning new skills and working on various creative projects in different areas of design.

# Acetabular Cup Taper Surface Protector

Crevice corrosion is one of the main causes of failure in modular hip implants. This project looks at designing a device that will prevent the taper surface of the acetabular cup from being contaminated with bone particles during surgery, reducing the risk of future failure. This is achieved using a device that prevents contamination throughout surgery up until the point when the surgeon activates removal of the device by inserting the liner. This process of removal greatly reduces the window of time for the contamination to occur.



### Karishma Bhadesia

4<sup>th</sup> Year - BSc(Eng) Multimedia & Arts Technology with Industrial Placement

Interests: UX/UI, Visual, Digital and Game Design, Arduino, Technology, Psychology, Spirituality.

Future: MSc Integrated Digital Media at NYU (2017) Aspiring for roles in UX/UI, Interaction/Game Design

# Meditation Medallion: Sensor Generated Visualisations

This project explores how technology can be used to support the art of meditation by providing personal records in visual forms. The meditation medallion is a wearable device which records the user's sound and movements made during the meditation session. The result consists of an application which generates visualisations that allows the users to differentiate between sessions and keep personal records of something that is otherwise transient.



# **Anand Subramaniam**

#### 4<sup>th</sup> Year – BSc(Eng) Multimedia & Arts Technology with Industrial Placement

- Freelance Filmmaker
- Technical Program Manager and Associate Game Producer at Microsoft (2014-2015)

Interests/Ambitions: filmmaking, code and design, product design, innovation/R&D, creative consulting, gaming, interactive systems

#### Mood Visualiser

During a live performance, a unique relationship forms between the music artist and their audience. The problem posed here is quantifying the audience's appreciation of music and experience in a meaningful manner. Mood Visualiser is a quasi real-time music visualisation web app which gauges audience arousal, in the live performance setting, through the measurement of electrodermal activity.



# Mahnoor Ahmad

4<sup>th</sup> Year – BSc(Eng) Multimedia & Arts Technology with Industrial Placement

Interests: Film, Photography, Travel, Dramatics, Entrepreneurship, Food.

Future: Gain experience in different areas of work/study, open up an interactive cafe, produce a film to promote Pakistani film industry, travel the world.

#### Remote Control Sock

According to research, the average person loses the remote control about 3-4 times/week. Moreover, it is found that most people have their hands full with snacks, phones and other things while watching videos.

The remote control sock is a wearable device that aims to make the experience of watching videos handsfree. The user is able to play, pause and adjust the volume of a video player using foot gestures.

# Innovation Heroes

We've invited back some of our brightest graduates to showcase their work and demonstrate the future potential of Queen Mary designers.



