Robert Garland

Multidisciplinary Designer and Engineer

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I am a multidisciplinary design engineer, grounded in human centred design, who is able to work with both hardware and software, thriving where the two are fused. My education has provided me with knowledge and experience in design thinking, engineering practise and commercial viability. I am young, enthusiastic and pragmatic, I think that my skill set and my willingness to learn and develop will continue to allow me to produce a diverse range of products that work from both a human centered and environmental perspective.

Education

Imperial College London - MEng Design Engineering (2017-2021)

- A member of the third ever cohort within a competitive new imperial course at the Dyson School of Design Engineering, completion June 2021.
- Predicted overall 2:1 with a 1st in Year 4.
- Relevant Modules including: Various Design Modules, Engineering Mathematics, Production and Materials, Electronics, Computing, FEA, Biomimetics, Mechatronics, Robotics, Optimisation, Design for Additive Manufacture.

St Josephs College Sixth Form - A-Levels

(2015-2017)

- A*AAB (Mathematics, Further Mathematics, D&T: Product Design and Physics respectively).
- Worked with an industrial manufacturing company during A2 Product Design to produce a key part of the project.

Experience

Elusive Parts - Design Engineer (March 2020 - January 2021)

- Initially joined on a 6-month placement as part of my MEng degree, transitioned to part-time following resumption of my studies.
- First employee of an early start-up looking to reproduce NLA and hard to find classic car parts using state of the art 3D scanning techniques and 3D printing.
- Oversaw the development of the business, from developing the reverse engineering process to front-end design (website, customer interactions) and corresponding with suppliers.

Redspeed International Ltd. - Product Development

(July 2019 - September 2019)

- Provided direction and guidance for a new vehicle speed enforcement system by developing concepts for the housing, internal layout and functionality of a new camera head.
- Visits to manufacturers to pitch the early concepts and discuss feasibility and production.

Optimise Automotive - Work Experience (April 2014)

 Valuable insight into a small business specializing in bespoke automotive interior trim and upholstery during my GCSE studies. Learned many hands-on practical skills.

Achievements and Interests

- Duke of Edinburgh's Awards (Bronze, Silver)
- A diverse range of innovative projects. View my online portfolio at www.robgarland.co.uk
- Participated in Formula Student at Imperial in Year 1
- Additional Interests including Mountaineering, Rugby, Cricket, Motorsport, Cycling, Racketlon, Golf, eSports and Video Production.

Voluntary Work:

- Kibblestone Scout Camp Den Team:
 Maintainance of Scout Camp stationed for 2-3 days)
- Care for an Elderly Gentleman: Looked after the care and wellbeing of a gentleman suffering with Alzheimers up to 10 hours at a time.

Skills

Sketching

Prototyping (Additive Manufacturing, Adobe XD) Programming (Python, Arduino, MATLAB)

CAD (Solidworks, Fusion360) FEA (Solidworks, Fusion360)

Graphic Design (Adobe InDesign, Photoshop,

Illustrator)

Rendering (Solidworks Photoview, Keyshot, Blender)

Video and Animation (Adobe Premiere Pro, After Effects)

Administration (MS Office)

Presentation Skills