Paul Cohen – Curriculum Vitae

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Education

Emmanuel College, University of Cambridge, Mechanical Engineering M.Eng. **October 2013 – June 2017**

Covered a general engineering syllabus for the first two years, before specialising in mechanical design in the final year.

Years 1 and 2 Courses:

Mechanics	Structures	Electronics	Thermodynamics
Linear Systems	Materials	Mathematics	Fluids
Year 1 Grade	**Class I**		
Year 2 Grade:	**Class I**		
Masters Grade	**Distinction**		

Year 4 courses:

Composite Design	Project Management
Non-linear Vibrations	Variational Methods
Design Case Studies	Biomimetics
Nano Materials	Management of Tech.

Massachusetts Institute of Technology, Mechanical Engineering (Cambridge-MIT Exchange) **September 2015 – May 2016**

Specialised in mechanical design and manufacturing, including precision machine design, finite element analysis, electromechanical system design, and design for manufacturing, as well as an English literature course at Harvard.

G.P.A: **4.9 out of 5.0**

A Levels: **Maths, Further Maths, Physics, Chemistry (A*s)** **GCSESs:** **12 A*s**

Experience

Mechanical Engineering Intern, Alloy Product Development (USA) **1 year, November 2017 – November 2018**

Alloy Product Development is a mechanical design consultancy based in San Francisco, California. They specialise in innovative mechanism design and tightly-packaged consumer electronics, at all stages of the product development process. An initial 3-month internship was extended twice, to the maximum 1 year allowed by the visa. Responsibilities included:

- Ownership of a complex mechanical subsystem for 9 months, designed to withstand high stresses (250kg load, 12 year outdoor lifetime, high-voltage electronics). Provided onsite support at the client as part of a 10-person team from Alloy; liaised with vendors in China, overseeing quality control and tooling modifications; pushed design changes for DFM and DFA purposes; designed test plans and rigs to meet regulatory requirements; managed priorities and expectations with the client in weekly meetings.
- Prototyping new designs and test rigs in metal, plastics, and wood using hand-tools and CNC machines.
- Participation in brainstorms for other projects at Alloy, for both early stage 'blue sky' concept generation and targeted problem solving.
- Working with a range of clients, from mature startups to Fortune 50 companies.

Intern, Frazer-Nash (Midhurst) **12 weeks 4th July – 23rd September 2016**

Frazer-Nash is a precision engineering and design company that specialises in the food industry. Worked in both the drawing office and on the factory floor. Responsibilities included:

- Developing the concept design for a novel hollow 3D printed horseshoe. Modelling in Autodesk Inventor and Magics; setting up and running builds on Renishaw AM250 SLM machine; working closely with stakeholders to inform design.
- Turning parts on a manual lathe from engineering drawings. Included various materials (stainless and alloy steels, aluminium bronze, aluminium), to tolerances as low as 0.013mm.
- Detailing engineering drawings of parts and assemblies, to be machined in house.
- Writing case studies on metal additive manufacturing capabilities; involved support structure experimentation.

Co-Leader of Mechanical Team, Cambridge University Eco Racing (CUER) **October 2017 – October 2018**

CUER is a student organisation that designs, builds, and races solar powered vehicles. As one of two co-heads of the mechanical team, I was responsible for the design and fabrication of various mechanisms and structural parts, including the solar panel reconfiguration system, door mechanism, and key structural components. I was also responsible for leading and mentoring a design team of 8 students.

System Integrator, '2.009 – The Product Design Process' at MIT **Fall semester 2015**

Led the product development for an innovative rock climbing device, as part of team of 22 students.

- Chaired team meetings; organised subteams; designed and prototyped concepts; managed $6500 budget.
- Fielded technical questions from audience of 1100. Voted 2nd out of 8 teams by audience.
- Obtained provisional patent on technology.

Skills and Awards

Languages	3D Modelling		Competencies	Awards	Other Achievements
French (A2/B1)	Solidworks		Mechanical Design	Ash Senior Scholarship	Grade 7 piano
C++	Autodesk Inventor		Mathematical Analysis	Wallace prize	Grade 5 music theory
Python	MasterCAM		Project Management	Rowley Mainhood prize	
Matlab	GeniE	Creo	3D Modelling	College prize (Emmanuel)	
Excel VBA	ADINA	Magics	Mill & Lathe Machining	Frank Marriott Scholarship	

Interests

I am a keen cyclist, rock climber and bike polo player. I enjoy listening to jazz, tinkering with bicycles, reading, spending time in museums, and exploring new cities.

References

Available upon request