BEN COBLEY | DESIGN ENGINEER

SUMMARY

Interdisciplinary design-focused engineer and developer. Skilled in technical prototyping at the intersection of hardware and software, with experience at Google X, Dyson, and Brompton. Recently graduated top of year from Imperial College London, now seeking a graduate role after a year's break building a camper conversion.

Portfolio of Work >

EDUCATION

Dyson School of Design Engineering, Imperial College London | *MEng Design Engineering* Oct 2016 - Jun 2020 First Class Honours, Highest Ranking Student of the Year [76%].

Topics include: **Computing** [Algorithms, Mechatronics, Physical Computing, Sensing and IoT, Big Data], **Engineering** [Robotics, Electronics, Mechanics, Finite Element Analysis, Additive Manufacture], **Design** [Human-Centered Design, Communication, Enterprise, Sustainability, Design for Production and Manufacture]. Master's Thesis: 'OnionBot: A System for Collaborative Computational Cooking'. Open-source cooking robot. <u>Paper ></u> RoPat20 Best Presentation: 'Design and Implementation of a Robotic Device for Medical Percussion'. <u>Presentation ></u>

EXPERIENCE

Google X | Rapid Evaluation Intern

Apr 2019 - Sep 2019

6-month Placement at *X, The Moonshot Factory* in California; prototyping a novel sensor technology with an early-stage team. Championed a new hardware generation, reducing overall size by 4x. Modified the technology to build the team's first demo 'product', including a touchscreen UI. Filed 2 Patent applications as primary author.

Dyson | Research, Design and Development Intern

Jul 2018 - Sep 2018

Tackled a design problem in an upcoming product. Responsible for production parts, from concept generation to design-for-manufacture. Presented functional prototypes to Senior Product Managers, demonstrating ability to understand and meet project design requirements.

Brompton Bicycle | *Design Intern*

July 2017 - Aug 2017

Designed and fabricated a new Brompton product as a team of interns; from a blank sheet of paper to 3 rideable, foldable prototype bicycles in 3 months. When released, it will be Brompton's first new bike format in 40+ years.

Dyson School of Design Engineering | *Undergraduate Teaching Assistant*

Oct 2018 - Jun 2019

Invited to become a Teaching Assistant through top-of-class performance in *GIZMO: Physical Computing and Mechatronics*. Taught Raspberry Pi fundamentals, wrote instructional documentation and assisted project work.

TECHNICAL SKILLS

Design | UX, UI, human-centered design, graphic design
Prototype | 3D printing, CNC, electronics, wood & metal fab
Control | Mechatronics, Raspberry Pi, computer vision
Connect | IoT, wireless communication, chip-level interfaces
Code | Python, MATLAB, Tensorflow. HTML, CSS and JavaScript
CAD | Siemens NX (@Dyson), SolidWorks, Simulation, Fusion
Visualise | Photoshop, Illustrator, InDesign, XD, Unity

INTERESTS

Making a positive impact on earth. Building new things. Cooking, robotics & cooking robots!

AWARDS

Head of School Greatest Achievement Prize | Highest overall degree result

Dean's List for Academic Excellence 2018/2019/2020 | Among top 10% of Cohort

PATENT APPLICATIONS

B. Cobley, R. Mehta, R. Gogoana <u>US16/721,035</u>
Machine olfaction system and method [2019]
B. Cobley, R. Mehta. <u>US17/028,245</u>
Machine olfaction system and method [2020]