

BEN COBLEY | DESIGN ENGINEER

EDUCATION

IMPERIAL COLLEGE | *Design Engineering [MEng]*

London, UK | Oct '16 - Jun '20

Design Engineering is a highly creative discipline at the intersection of hardware and software. Strong emphasis on concept-to-realisation through technical prototyping, user-centred design, product innovation and enterprise.

- **Achieved First Class Honours and Highest Overall Degree Result of the 2020 Cohort.**
- Awarded IROS 2022 Best Application Paper for *Soft Tissue Characterisation Using a Novel Robotic Medical Percussion Device With Acoustic Analysis & Neural Networks*. Published in IEEE RA-L. [Project>>](#) [Paper>>](#)
- First class Master's Thesis: *OnionBot: A System for Collaborative Computational Cooking*. [Project>>](#) [Paper>>](#)
- Taught RPi/Arduino: offered paid Teaching Assistant role through top-of-class results in *Physical Computing*.

EXPERIENCE

TRUECIRCLE AI | *Design Engineer*

London, UK | Nov '21 - Dec '22

TrueCircle AI is a climate-tech startup developing ground-breaking computer vision systems that enable recycling facilities to recover valuable material more effectively and sell material more efficiently, reducing landfill.

- Launched TrueCircle's minimum viable hardware prototype and led pilot installation at a UK recycling facility.
- Demonstrated technical leadership; designed processes to enable handing over installation work to a 3rd-party supplier, proving scalability, a key requirement for TrueCircle's upcoming Series A.
- Implemented strategy to reduce failure rate. Outlined roadmap for new hardware concept, eliminating 3 key known failure modes: saving £1000s in maintenance costs.

GOOGLE X | *Rapid Evaluation Intern*

Mountain View, USA | Apr '19 - Sep '19

Six-month placement at X, Google's Moonshot Factory, an organisation focussed on finding the 'next Google'.

Collaborated with an early-stage team to help prototype and evaluate a novel sensor technology.

- Championed an all-new hardware version, reducing size by 4x while increasing sensor resolution 2.5x.
- Built software integration for Mineral, Google's Farming Robot, adding new sensing capabilities to the system.
- Filed 2 Patent applications as primary author.

DYSON | *Research & Development Intern*

London, UK | Jul '18 - Sep '18

- Owned concept development for a new interface on an unreleased product. Received grad role return offer.

BROMPTON BICYCLE | *Design Intern*

Malmesbury, UK | Jul '17 - Aug '17

- Collaborated as an all-intern team to completely redesign and fab 3 prototype bikes in 3 months.
- Project received CEO approval for commercialisation: it will be Brompton's first new bike format in 40+ years.

SKILLSET

Engineering | Skilled in technical prototyping to test hypotheses:

- Experienced in embedded systems with RPi + Python. [Project>>](#)
- Good understanding of ML at a prototype level. [Project>>](#)
- Built polished interfaces in HTML/CSS/JS. [Project>>](#) [Portfolio>>](#)
- Strong ability to apply principles in new contexts.

Design | Design-thinking mindset & iterative prototyping approach:

- Strong foundation in UX & usability. [Project>>](#)
- Comfortable in fast, entrepreneurial environments. [Project>>](#)
- Excellent communication and presentation skills.

AWARDS

Head of School Achievement Prize 2020

| Highest Overall Degree Result.

Dean's List for Academic Excellence

2018/2019/2020 | Top 10% Year Result.

PATENT APPLICATIONS

B. Cobley, R. Mehta, R. Gogoana [pending]:
Machine olfaction system and method.
[US16/721,035](#) [2019] [US17/028,245](#) [2020]