# BEN COBLEY | DESIGN ENGINEER

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## **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. Paper>>>
- First class Master's Thesis: OnionBot: A System for Collaborative Computational Cooking. 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 initial pilot installation project.
- Demonstrated technical leadership; designed procedures that enabled outsourcing of installation work to a 3rd-party supplier, proving process scalability, an essential 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 per unit 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 by 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. <u>Patents>></u>

#### DYSON | Research & Development Intern

London, UK | Jul'18 - Sep'18

Owned concept development for a novel 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 fabricate 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: Head of School Achievement Prize 2020

- Confident building hardware & software for embedded systems.
- Executed highly polished interfaces in HTML/CSS/JS.
- Good understanding of ML & LLMs at a prototype level.
- Strong ability to apply principles in new contexts.

#### Design | Design-thinking & iterative prototyping approach:

- · Strong foundation in UX, usability & interfaces.
- Comfortable in fast, entrepreneurial environments.
- Excellent communication and presentation skills.

## **AWARDS**

| 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. <u>US16/721,035</u> [2019] <u>US17/028,245</u> [2020]