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. Patents>>

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:

- Experienced in embedded systems with Raspberry Pi + Python.
- Good understanding of implementing ML at a prototype level.
- Built highly polished interfaces in HTML/CSS/JS.
- Strong ability to apply principles in new contexts.

Design | Design-thinking mindset & iterative prototyping approach:

- Strong foundation in UX & usability.
- Comfortable in fast, entrepreneurial environments.
- 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]