DAVID O'BRIEN-MØLLER

Masters of Engineering student at University of Cambridge

@ do340@cam.ac.uk +447444164023

EXPERIENCE

Masters Project: Design of Energy Efficient Sub Sea Ice Profilers

Technical University of Denmark & University of Cambridge

August 2021 – June 2022 Copenhagen, DK & Cambridge, UK

- Coordinated a collaboration between the Technical University of Denmark (DTU) and University of Cambridge
- Worked over the summer deeply reviewing 6 different technologies that would allow DTU to monitor essential ocean variables under the sea ice that surrounds Greenland
- Wrote Python scripts using historical current data that allowed me to analyse the forces that act on submerged bodies subjected to ocean currents
- Compiled a report detailing the strengths, weaknesses, expected costs and technology readiness level of each different solution
- Designed a Remotely Operated Towed Vehicle for observing seabed.
- As my Masters thesis, the development of a novel form of energy efficient sub sea ice profiler that solves many of the issues with the current available technology was investigated. A prototype device was designed and constructed, a computer vision tracking based system developed and various control algorithms created to find how to control it in an energy efficient manner.

Society President

Cambridge Autonomous Underwater Vehicle Society

Sept. 2019 – Sept. 2020 Cambridge, UK

- Revitalised a society focused on designing, building and programming autonomous underwater vehicles for international competitions
- Led the mechanical design team
- Learnt about underwater technology and the challenges the environment brings.

9 Week Summer Internship

Rambøll A/S, Tunnels department

July 2019 – August 2019 Copenhagen, Denmark

- Worked in the tunnels department on a variety of international projects ranging from gas pipelines in Poland to a new immersed tunnel between Germany and Denmark.
- Communicated technical engineering information cross functional differences.
- Reviewed drawings for proposed developments
- Drafted presentations on tunnel safety, tasks that could be outsourced, and on the finances of Rambøll.

Joint IT & Ticketing Officer of Girton College Spring Ball

Girton College

Sept. 2019 – March 2020 Cambridge, UK

- Created a ticketing system using python and SQL which created, sent and checked tickets of 1000 guests. It worked flawlessly throughout the event. Built and managed the website and IT for the event.

ACHIEVEMENTS

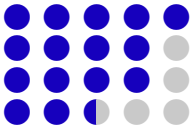
Cambridge University International Development Hackathon
First place in our category. Designed and prototyped a passive device to keep vaccines cool for longer periods

Cambridge University & Nottingham University Hackathon
First place in Virtual Operational Process Planning competition for an integrated system for warehouse logistics management, responsible for front end and hardware integration.

Bifrost Zero G competition
Placed in top 6 teams of Belgium, designed and built an apparatus to measure how airflow varied with acceleration to zero gravity

LANGUAGES

English
Danish
French
German



EDUCATION

M.Eng in Mechanical, Control and Information Engineering (Current Grade: 2.1)

University of Cambridge

2018 – 2022 Cambridge, UK

High School Diploma (92.45%)

European School of Brussels III

2011 – 2018 Brussels, Belgium

REFEREES

Prof. Hugh Hunt
@ University of Cambridge
hemh1@eng.cam.ac.uk

Fletcher Thompson
@ Danish Technical University
fletho@aqua.dtu.dk