

DAVID O'BRIEN-MØLLER

MEng in Information, Control, and Mechanical Engineering

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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, I investigated the development of a novel form of energy efficient sub sea ice profiler that solves many of the issues with the current available technology. 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

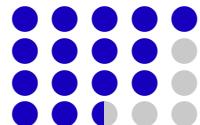
LANGUAGES

English

Danish

French

German



EDUCATION

M.Eng in Mechanical, Control and Information Engineering (First Class Honours Project, II.1 modules)

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

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@ Danish Technical University

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