Case Study

Ota Dvorak

EPSRC & NERC InDustrial CDT for Offshore Renewable Energy

www.idcore.ac.uk

GDG GAVIN & DOHERTY GEOSOLUTIONS

Project

Ota's project is focussed on evaluating the impact of government policy on floating offshore wind markets, particularly those policies that require a minimum level of local content in developer supply chains. He is evaluating the impact of such policies on employment, economy, society and the environment.

Shaping this into an effective project that both meets the needs of his sponsors and requirements of an EngD continues to be challenging. However, he is currently developing a tool that can be used to evaluate future policy changes and to support his sponsor's input to work packages on an IEA programme – 'IEA Wind Task 49'. He also plans to use it to support in-house cost models designed to analyse operational costs and establish the link between policy and life cycle costs of energy for different projects. In this way they will better understand when and where floating offshore wind is likely to deploy commercially.

Sponsor

Gavin & Doherty Geosolutions (GDG), Ota's sponsor, offers specialist design and consultancy services across a wide range of offshore and onshore infrastructure and construction sectors. They were recently purchased by Venterra, a group that strengthens the offering GDG had already developed around pre-construction in the offshore renewables sector.

Ota chose to work with them because of their involvement in IEA Wind Task 49, which he saw as a great opportunity to engage in the process of bringing floating offshore wind to market. At the time he was interested in ultimately working in the US market where floating offshore wind is likely to be the only solution for many applications.

We are currently sponsoring two IDCORE students in the team I work in, and they are both making a valuable contribution to our work. They have come to us with strong background knowledge and skills, and their enthusiasm helps to keep us curious.

GDG originated from a PhD project by founder Paul Doherty, so we have always been focussed on innovation and have supported a number of PhD projects in the past. The key benefit of IDCORE is that the researchers come ready to contribute, and the input Ota has already made to our work demonstrates that.

Greg Bohan,
Senior Offshore Consultant, GDG

Background

Ota grew up in Prague and then went to the University of Edinburgh where he graduated from the five-year Integrated Masters programme in Mechanical Engineering in 2022, so his undergraduate years were quite severely affected by the COVID pandemic. Despite his planned industrial placement being cancelled, he did manage to secure three months with a company and an internship post-degree, providing an industrial context for his studies.

Ota is also a sailing instructor, and he was able to bring this and his interest in hydrodynamics together in a final year project exploring the potential of hydrofoils for yachts, supervised by David Ingram, Director of IDCORE.

> ***During my first degree I developed an interest in both renewables and hydrodynamics. When working on my final year project with David, he encouraged me to think about IDCORE as a good way of pursuing these interests, undertaking research but in an industrial context that avoided some of the issues that I had seen friends struggle with on PhD programmes.***
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> ***The first year on IDCORE was excellent, I've never learnt so much in such a short space of time. The background knowledge I had from the Masters at Edinburgh definitely helped with this, but there were modules that were completely outside of my experience and these were just as enjoyable. The material is delivered by people who are actively engaged with their subjects and the learning is really well structured.***
>
> *Ota Dvorak*

IDCORE

Ota hasn't finished up working in hydrodynamics, and the start of his project wasn't straightforward, but overall his IDCORE experience has been worthwhile. He has learnt a lot from it, not least developing his mental resilience which he knows will benefit him in the future. All of this has been helped by the ten good, supportive friendships created by being part of a cohort who embarked on this journey together.

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