VEC VIRTUAL ENGINEERING CENTRE

The Virtual Engineering Centre supports the development of digital skills through harnessing learning of a student placement in regional project

BACKGROUND

Harry Doyle joined the Virtual Engineering Centre (VEC) on a six-month student internship from the University of Edinburgh, where he is studying Mechanical Engineering, with a particular focus on renewable energy.

During his fourth-year studies, Harry wanted to take on an Industrial Placement and approached the VEC after learning about the innovative projects we support, using an array of digital tools and technologies that raised interest, to support businesses in the development of current processes and product journeys.

EXPERIENCE

With a key interest in sustainability and working within engineering to improve society and challenge the climate crisis, Harry was excited to join the VEC team to work on Project FAITH, a collaborative project between the University of Liverpool, Cammel Laird and the National Nuclear Laboratory, to overcome project delivery challenges posed by the COVID-19 crisis.

Harry saw this as a huge learning opportunity within an area he was not familiar with, including the use of virtual technologies and adapting these to a real-life industry scenario.

The VEC supported the transfer of knowledge and demonstrating VR to accelerate the review of their current HAZOP process whilst working remotely toward developing a digital twin during more severe periods of national lockdown during the COVID-19 pandemic.

Virtual Engineering Centre
University of Liverpool
Daresbury Laboratory
Sci-Tech Daresbury
Warrington WA4 4AD

+44 (0)1925 864 854
vec@liv.ac.uk
virtualengineeringcentre.com

UNIVERSITY OF LIVERPOOL

Working closely with our collaborative partners, Harry helped to facilitate the development of a virtual thermal hydraulic rig, exploring and investigating the potential different applications of VR during the design stage as a proof of concept.

The full-scale virtual model allowed the VEC to identify and highlight the different operating conditions and variables which would be faced in the real world, enabling partners to make continuous improvements throughout the design phase.

BENEFITS

On reflection, Harry believes his placement at the Virtual Engineering Centre was a huge opportunity for him and his career, learning more about emerging technologies, applying this to real industry scenarios, whilst making connections and contacts within the Virtual Engineering Centre and collaborative partners.

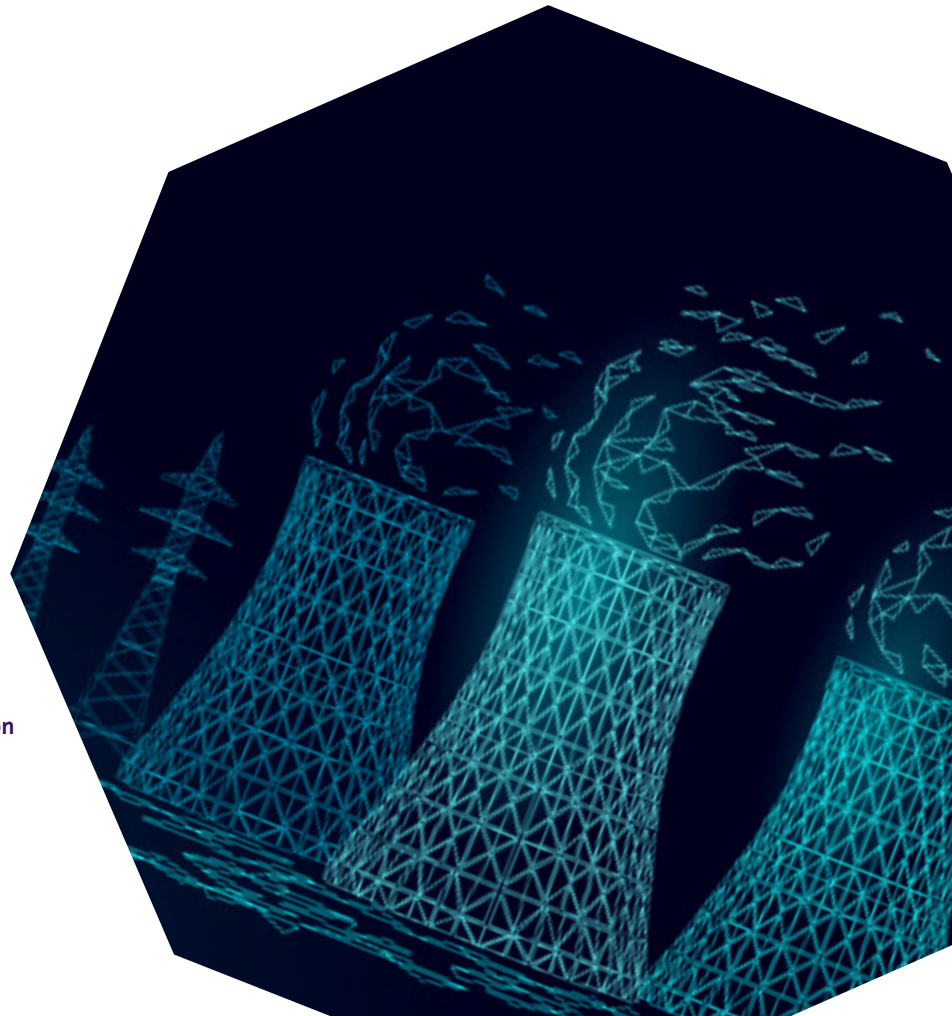
Harry also learnt more about the real day-to-day challenges of an engineer and how innovative technologies and digital tools are being utilised to offer solutions to an array of business trials.

"Throughout this project, my development took a really big leap and I have learnt a lot, even about different hardware and software used to achieve a number of project and organisation goals including developing CAD data for enhanced modelling for example.

I have now seen first-hand the importance of innovation and engineering through design involvement. Whilst many companies can be complacent about processes, working at the VEC has proven that even basics can be improved – this is now what I see innovation is all about.

"I'd really recommended young people and other students to get involved as best and as early as they can to seek out new ways into industry.

I'd say to be openminded for new opportunities, challenge yourself and take yourself out of your comfort zone and area of knowledge - I was unfamiliar with the technology at the VEC but that's meant I've had a huge opportunity to learn and that's done nothing but benefit me and allowed me to get the most out of this experience."



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