



CAREERS MENTORING PROGRAMME CASE STUDY

With a background in Physics and Maths, Aristotelis Liakatas is a Software Engineer at Jacobs, based in Winnersh Triangle. Jacobs provides global technical consultancy services in areas including infrastructure, aerospace, defence, energy, the environment, and advanced facilities in industries like biotechnology and electronics, as well as supporting government bodies.

Aristotelis is originally from Greece, where he studied for a Bachelors degree in Physics, and then a Masters degree in Meteorology. He got a second Masters in Maritime Engineering – Computational Fluid Dynamics at the University of Southampton. Aristotelis began working for Jacobs in 2017.

What are you hoping to achieve as a mentor?

My aim is to inspire students to pursue their dreams, take advantage of new opportunities, and challenge themselves in order to achieve their very best. Additionally, I hope to share my passion and expertise in STEAM subjects.

What do you do at Jacobs?

I am a Software Engineer working primarily on the numerical solvers of the 'Flood Modeller' software suite. It is a physics-based simulation software that helps users model the flow of water through river channels, urban drainage networks and floodplains.

Applications include designing of flood defences to help protect people and their properties, flood forecasting or even economic and risk assessment and

analysis. I design and develop new features for the software and improve existing functionality. One of the most exciting aspects is my collaboration with universities to commercialise their research, working on the cutting edge of science and technology.

How did your first mentoring session with your group go?

Admittedly, it was a learning curve for everyone involved. Some students were hesitant, while others were more engaged. We focused on their interests, and potential outcomes of the mentoring programme.

They were particularly interested in what a typical workday of an engineer looks like and what kind of problems we face. Some had specific questions about things related to their interests, for example, typical problems regarding complex projects and how we may go about solving them.

What do you think will make you a good mentor?

The range of my interests is quite broad, so I can draw from personal experience when they need advice. I also like asking questions to better understand others. I believe that sharing my enthusiasm about my work and hobbies will inspire students to become passionate about the things that they enjoy.

Moreover, having worked in diverse professional settings over the years I have developed the skills to support students with any challenges, offer advice, and encourage them to seek guidance.

I think this mentoring programme will help them develop decision-making skills, work hard to achieve their goals and learn how to seek support from professionals.