

Jacob Argulo is studying for a PhD within the School of Engineering at Liverpool University under my supervision. He is supported by a BAE SYSTEMS/EPSRC CASE award. His research is attempting to develop a new approach to simulating the very demanding physical problem of cavity flow when the geometry is made more complex (realistic) than is commonly the case.

The approach adopted is to develop a meshless code to solve the Reynolds' Averaged Navier-Stokes equations. The use of reconstruction methods on point clouds reduces the difficulty of producing a conforming grid. The final methodology/code is potentially of great utility for BAE SYSTEMS, considering the geometry of aircraft such as F-35 and development UCAV's.

Good progress has been made to date with a prototype code already running. This code is currently sequential, but to simulate large scale problems it will need to be parallel. Hence the requirement for Jacob to attend the course. He has proved that he has the requisite programme skills to benefit from the course.

I strongly support his application for assistance.

Prof Ken Badcock

Head of the School of Engineering,

University of Liverpool.