

Impact Story

Making simulations simpler

Software engineers at the Turing, in collaboration with partners at Imperial College and UCL, have developed a user interface (UI) that aims to make the simulation process more user-friendly, for both academic and industrial communities.

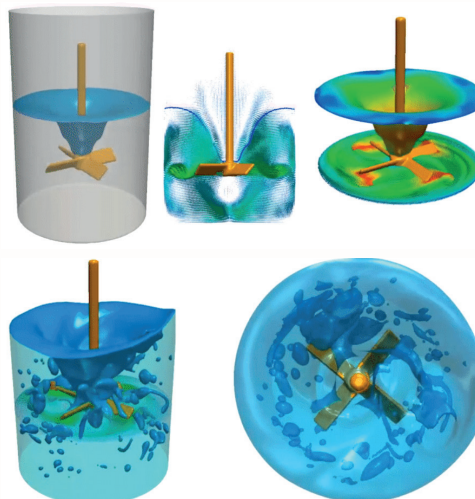
- Simulations are a useful part of many professionals' and academics' toolkit, particularly in engineering, but not everyone has the specific skills and coding knowledge needed to quickly and easily run and visualise them.
- The Research Engineering team at the Turing, the MEMPHIS group at Imperial College, and the Research Software Development Group at UCL have worked together to develop an application to help with this.
- Features a customisable, browser-based user interface (UI) that allows for effortless setup and visualisation of simulations and their results.
- Tool works as part of a pipeline that includes seamless, secure connection to supercomputer clusters.
- Proof of concept of the UI was demoed at an industry showcase at Imperial College on 15 September 2017.
- Richard Craster, Professor of Applied Mathematics at Imperial: "The UI was admired by several of our industry partners and showed the concept is more than viable".
- The team is now developing an enhanced prototype with the ultimate goal of having an application that industrial partners start using as part of their day to day businesses.

Impact

- Lowering barrier to entry
- Increasing innovation opportunities
- Reproducibility of results
- Tackling key challenge of the Turing's data-centric engineering programme
- Core code of the app open source

"We bring research code out of the academy and onto the desktop"

James Hetherington, Director of Research Engineering at the Turing



Visualising simulations helps to show the significant effects of tiny changes in parameters