

4 year PhD studentship, Faculty of Engineering, University of Nottingham
EPSRC Centre for Doctoral Training in Additive Manufacturing and 3D Printing

Title: Capacity Aggregation for Additive Manufacturing

The doctoral project will be based at the Faculty of Engineering at the University of Nottingham. Over the course of this project you will have access to one of the most comprehensive Additive Manufacturing (3D-Printing) laboratory facilities. For more information, please see <https://www.nottingham.ac.uk/research/groups/3dprg/>.

Project description:

Originating from material deposition processes used in prototyping, Additive Manufacturing (AM), which is also known as 3D Printing, is currently experiencing adoption in a broad range of manufacturing applications, including automotive, aerospace, industrial equipment, medical devices and consumer products. At this point, however, the true commercial promise of the technology is largely unclear as the operational and managerial aspects surrounding it are poorly understood.

To realise efficient AM manufacturing execution in a wide range of commercial settings, the production planning and machine setup up functions need to be addressed appropriately. Focusing on computational approaches and digital frameworks, this project will identify the elements needed to address the resulting capacity aggregation problem in an integrated way. It will then investigate an implementation of this functionality, aiming to reconcile the concepts of Digital Manufacturing with Additive Manufacturing on a practical and theoretical level.

The project will be supervised by Dr Martin Baumanns and Prof Chris Tuck.

Eligibility

- Due to funding restrictions, the position is only available for UK or EU candidates
- Candidates must possess or expect to obtain, a high 2:1 or 1st class degree in Engineering, Computer Science, or other relevant discipline. Students with an Operations Management or Operations Research background are particularly encouraged to apply.
- Candidates will be available to start on the following date: 1st October 2018.

How to apply

Please send a copy of your covering letter, CV and academic transcripts to amcdt@nottingham.ac.uk.
Please note, applications without academic transcripts will not be considered.

Closing date 27th April 2018.