**Fulbright Program Information**

**Award Type**: Study/Research Award

**Country**: United Kingdom

**Award**: University of Nottingham Award

**Program:** Additive Manufacturing and 3D Printing MSc

Field of Study

**Engineering**

Project Title

Enter a descriptive Project Title. If awarded a grant, this Project Title will appear in the Grantee Directory.  
90 character limit.

**Additive Manufacturing and 3D Printing**

Abstract/Summary of Proposal

Prepare an executive summary detailing the what, where, and why of your proposed project․ If you are proposing the pursuit of a graduate degree program, summarize the program and relevance to your career/education plans․  
*200 word limit.*

It is rare to play a role in the disruption to the biggest, and even oldest industry in the world, manufacturing. The University of Nottingham, notorious for its world-leading research, hosts the most prestigious masters in additive manufacturing and 3D printing. Not only will the program teach me advanced skills and knowledge in 3D printing, but it will allow me to look forward and play a role in the future of the technology. From learning first-hand, additive manufacturing, which is the process of building up designed computer parts layer by layer, offers a company the ability to manufacture parts otherwise impossible to create outside of a computer screen. The aerospace industry, which is well known for complex parts and mind-bending challenges, has been able to use this tech, although still infantile to its potential, to improve performance and manufacturability of some of the most complex parts in the world including rocket engine nozzles and injectors. The connections between accelerating the path to make humans a multi-planetary species and the opportunity for advanced additive manufacturing to play a role is not only tantalizing but drives me to develop the skills to make a significant difference.

Host Country Engagement

A key purpose of the Fulbright program is to be a cultural ambassador while living abroad.  How will you engage outside of the workplace to fulfill this mission?  In what ways do you plan to share your culture and values in your host community?  Provide specific ideas.  
*200 word limit.*

We constantly live within proximity to everything we interact with: to what is below you and what is in front of you. But the reason for wanting to work with additive manufacturing, and its direct connection to the aerospace sector, is that it progresses the most cosmopolitan future-industries in the world, which is what is directly above you. In fact, it is the only physical location that is the same distance away from everyone, just 100 kilometers above everyone’s head. I plan to bring the exact experiences I had growing up that made me intrigued in space and engineering to the UK, with model rocket design and launching, and tinkering at local makerspaces, as these concepts and experiences, no matter where you are, are fundamental in nature. I had the privilege of starting a local Students for the Exploration and Development of Space (SEDS) chapter at my university, dedicated to allowing students passionate about the aerospace industry work together to support learning, outreach and professional networking. The community that can be built and the cultural exchange and appreciation that a SEDS chapter can foster is a fundamental reason I would like to see the start of a chapter at the University of Nottingham, continuing the naturally supportive and accepting culture that has been the aerospace industry.

Plans Upon Return to the U.S.

Describe your career and/or educational plans after completing a Fulbright grant.  
100 word limit.