

## Deepanshu Singh Bio

I am a second-year doctoral student in the Department of Engineering Science at University of Oxford. I am working with Rolls-Royce to improve the efficiency of gas turbine aircraft engines. My research focuses on experimental and computational investigation of Over-Tip Leakage flow in a shroudless high pressure gas turbine. Using thin-film based instrumentation, I have been studying turbine blade tip and casing heat transfer for a variety of tip designs in the OTRF (Oxford Turbine Research Facility), a high-speed rotating facility at engine representative conditions.

Before starting my DPhil at Oxford, I completed my undergrad in Mechanical Engineering at IIT (Indian Institute of Technology) Delhi. My Bachelor's thesis was focused on Optimisation of the performance of Vertical Axis Wind Turbine through radial overlap between twin rotor. During my undergrad, I completed two research internships at University of Oxford, both focused on instrumentation projects. My findings were published at ASME Turbo-Expo 2016 (Seoul, South Korea) and 2017 (Charlotte, USA), both of which I was able to present upon securing ASME Student Advisory Committee Travel Award. I also undertook an internship at National Cheng Kung University in Taiwan during which I worked on ducted fan design for electrically powered aircraft engines.

In my spare time, I enjoy playing tennis. At Oxford, I have represented the men's team in numerous league matches. In addition, I am presently serving as the President of Oxford University Scientific Society, oldest student run science society in the world with the goal of disseminating scientific knowledge through weekly talks delivered by eminent speakers invited across the globe.