

## **Fully Funded EPSRC PhD Case studentship.**

### **Project Title: Compact Broadband Interferometer**

Applications are invited from suitably qualified graduates for a **fully funded PhD studentship** (3 years) for Renishaw/Royal Academy Research Program within the **EPSRC Future Manufacturing HUB for Advanced Metrology**. The EPSRC HUB sets out to create ground breaking embedded metrology and universal metrology informatics systems to be applied throughout the manufacturing value chain as an essential tool to achieve significant growth and productivity gains in UK manufacturing.

### **The PhD Project**

To develop a broadband optical interferometer for measuring surface roughness, to be deployable on a robot. The research should focus on the following areas: Compactness of design. Sensitivity to vibration. Time to capture height data for a 2d region of a surface. Robustness to different surface geometry and materials. Surface roughness in the range of  $R_a = 0.5 - 5\mu\text{m}$ .

**Eligibility:** The student must have a high-grade qualification, at least the equivalent of a UK 1st or 2:1 class degree or MSc with distinction in computing science, mathematics or related disciplines. The student must be proficient in both written and spoken English, and possess excellent presentation and communication skills. The applicants are also expected to have excellent software programming ability: (1) Solid fundamentals of C/C++/C# program development; (2) Familiar with COM techniques; (3) OpenGL and GDI/GDI+ development;

**Salary:** £15,285 (2020/21 EPSRC Standard)

### **Contact:**

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