



Microwaves and Antenna Engineering Group
Heriot-Watt University
Edinburgh, United Kingdom
<https://microwaves.site.hw.ac.uk/>

PhD Studentship

Highly Integrated Active Antenna Array

Introduction

The demand for massive amounts of data transmission at high speeds is a primary driving force for the evolution of wireless communication, in which, beyond 5G (B5G) and 6G are envisaged to accommodate the stringent requirements in the next decade. B5G and 6G are expected to integrate thousands of transmitted channels and antenna elements to boost the spectrum efficiency and provide high data throughput with ultra-low latency. This brings a new challenge to the highly integrated active antenna array design owing to dynamic and nonlinear interactions in-between.

This PhD project aims to develop a new highly integrated active antenna array by co-designing power amplifier, antenna array, and digital signal processing. The successful candidate will be based within the Institute of Signals, Sensors and Systems at Heriot-Watt University (Edinburgh Campus).

Eligibility

The successful candidate should hold an Honours Degree or a Master's Degree in Electrical Engineering (e.g., power amplifier, microwave engineering, electromagnetics, antenna theory, wireless communication), Physics or other relevant subject area.

Funding

Awards cover a tax-free stipend of £15,609 per year and tuition fees waived for three years. All UK, EU and international students are eligible to apply.

Duration

Three years.

Closing date

The position is available immediately and will be open until it is filled.

How to apply

To apply for this position, please contact Dr Haijun Fan (h.fan@hw.ac.uk).