

PhD Studentship: Modelling and Mitigation of Advanced Computer Network Attacks

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Project Detail:

We invite applications for a 3-year PhD Studentship to work in computer networks and network security, in the Wolfson School of Mechanical, Electrical and Manufacturing Engineering at Loughborough University. The successful applicant will join the Signal Processing and Networks Research Group, under the supervision of Dr. Konstantinos Kyriakopoulos.

The successful applicant will perform high-quality research in topics related to computer networks and network security. Therefore, a strong background in computer network communications, which involves the Internet protocol suite, is essential. A core element of this project will be identification and modelling the characteristics of advanced network attacks. Leveraging the developed model to mitigate such attacks in a Software Defined Network will also be part of the project. This project is of high academic and industrial interest and is of high demand for employment. Of particular research interest to this post is pattern and state recognition for decision making in advanced network attacks, machine learning and statistical algorithms for anomaly-based intrusion detection. If you are interested, contact the primary supervisor for more details. Please note that, when making your application, you will be required to submit: CV, degree transcripts & certificates, personal statement and a research proposal.

Entry requirements:

The successful applicant should have a 1st class or high 2:1 honours (or equivalent) degree in electronic/electrical engineering, computer science or a closely related discipline. Candidates may check the International qualification equivalencies by clicking this [link](#). An MSc with Distinction is desirable.

High level knowledge of computer networks and the communication protocol stack (TCP/IP stack) and network traffic monitoring are required. Good analytical research and communication skills are essential. The successful candidate is also expected to be an enthusiastic team player who can work both independently and with others.

Strong, demonstrable coding skills in C, Python or MATLAB and Linux OS are desirable. Experience with machine learning techniques and mathematical frameworks for decision making are desirable.

All applicants must also meet the minimum English language requirements, details of which are available on the [Loughborough University website](#).

Funding information:

The studentship will start in October 2017, for three years, and currently provide a tax-free stipend of £14,553 per annum plus tuition fees at the UK/EU rate (currently £4,195 p.a.). While we welcome applications from non-EU nationals, we cannot guarantee that full funding will be available due to funding restrictions.

Contact details:

Name: Dr. Konstantinos Kyriakopoulos

Apply: <http://goo.gl/IUSSBI>

Qualification type:	PhD
Location:	Loughborough
Funding for:	UK Students, EU Students
Funding amount:	£14,553 per annum
Hours:	Full Time

Placed on:	25th May 2017
Closes:	7th August 2017
Reference:	KK25052017