

**Foukas Xenofon**  
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## EDUCATION

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**Oct. 2013 – July 2018**      **The University of Edinburgh**  
Edinburgh, United Kingdom

School of Informatics  
PhD in Wireless Networks and Mobile Systems  
Thesis: “*Towards a Programmable and Virtualized Mobile Radio Access Network Architecture*”  
Supervisor: Reader Mahesh K. Marina

**Oct. 2012 - Sep. 2013**      **Imperial College London,**  
London, United Kingdom

Department of Computing, MSc in Advanced Computing  
GPA: Distinction (86/100) – Distinguished thesis project “*Sampling in a Large Network*” – (82/100)  
Supervisor: Prof. Alexander L. Wolf

**Sept. 2007- Feb. 2012**      **Athens University of Economics and Business (AUEB)**  
Athens, Greece

Department of Informatics, BS In Computer Science  
GPA: Distinction (9.44/10) (ranked 1<sup>st</sup> in a class of about 250 students and 3<sup>rd</sup> since 1983)  
Undergraduate thesis titled “k-LWPR: Speeding up LWPR through clustering” - Grade:10/10  
Supervisor: Prof. Michalis Vazirgiannis

**2004-2007**      **2<sup>nd</sup> High School of Ilion,** Athens, Greece  
GPA: 19.7/20

## WORKING EXPERIENCE

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**April 2018 – present**

**Univeristy of Edinburgh, Edinburgh, United Kingdom,** Working as a Research Associate in the research group of Dr. Mahesh K. Marina, focusing on problems relevant to the **5G network architecture & network slicing**.

**May 2016 – April 2017**

**University of Edinburgh, Edinburgh, United Kingdom and**

**NCSR “Demokritos”, Athens, Greece,** Worked as a Research Associate in the PACER project, which was part of the second open call for experimentation of the European FP7 FLEX project (FIRE LTE testbeds for open Experimentation). Developed a prototype open source Software-Defined RAN platform called FlexRAN (<http://networks.inf.ed.ac.uk/flexran/>).

**July 2013 – December 2014**

**NCSR “Demokritos”, Athens, Greece,** Marie-Curie Early-Stage-Researcher for the GREENET

project on green wireless networks.

#### **July 2012 – Sept. 2012**

**Ecole Polytechnique, Paris, France**, Worked at the Informatics Laboratory (LIX) under the supervision of Prof. Michalis Vazirgiannis.

#### **Jan. 2012 – May 2012**

**GSIS, Athens, Greece**, Worked in cooperation with the “General Secretariat for Information Systems” of the Greek Ministry of Finance to create a dictionary with the names of all the Greek streets and settlements.

#### **Nov. 2011 – Feb. 2012**

**Intracom Telecoms, Athens, Greece**, Internship under the supervision of S.Soursos – Developed a simulation model for a smart flooding algorithm for content based networks using OMNeT++.

#### **2009-2010**

**AUEB**, Teaching Assistant in the course “Computational Mathematics”.

### **PUBLICATIONS**

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1. X. Foukas, F. Sardis, F. Foster, M. K. Marina, M. A. Lema, M. Dohler, “Experience Building a Prototype 5G Testbed”, In *Proc. 1st International Workshop on Experimentation and Measurements in 5G (EM-5G) in conjunction with ACM CoNEXT 2018 (to appear)*, Dec 2018
2. X.Foukas, K. Kontovasilis and M. K. Marina, “Short-Range Cooperation of Mobile Devices for Energy-Efficient Vertical Handovers”, In *Wireless Communications and Mobile Computing (WCMC) Journal Special Issue on Green Computing and Communications for Smart Portable Devices*, Jan 2018.
3. X. Foukas, M. K. Marina and K. Kontovasilis, “Orion: RAN Slicing for a Flexible and Cost-Effective Multi-Service Mobile Network Architecture”, In *Proc. ACM MobiCom’17*, Oct 2017.
4. G. Tsoukaneri, X. Foukas and M. K. Marina, “ASPIS: A Holistic and Practical Mechanism for Efficient MTC Support over Mobile Networks”, In *Proc. IEEE Mobile and Ad Hoc Sensor Systems (MASS’17)*, Oct 2017.
5. X. Foukas, G. Patounas, A. Elmokashfi and M. K. Marina, “Network Slicing in 5G: Survey and Challenges.”, *IEEE Communications Magazine*, 55(5), pp.94-100.
6. X. Foukas, N. Nikaein, M. M. Kassem, M. K. Marina and K. Kontovasilis, “FlexRAN: A Flexible and Programmable Platform for Software-Defined Radio Access Networks”, In *Proc. ACM CoNEXT’16*, Dec 2016.
7. S. Sivaprakash, X. Foukas, M. K. Marina, “ VALI: An SDN-based management framework for public wireless LANs (Poster)”, In *ACM MobiCom 2016*
8. X. Foukas, K. Kontovasilis and M. K. Marina, “Exploiting Short-Range Cooperation for Energy Efficient Vertical Handover Operations”, In *Proc. 11th International Conference on Network and Service Management (CNSM’15)*, Nov 2015.

9. X. Foukas, M. K. Marina and K. Kontovasilis, "Software Defined Networking Concepts," as a chapter in the book on Software Defined Mobile Networks (SDMN): Beyond LTE Network Architecture, Jun 2015.
10. X. Foukas, A. Carzaniga and A. L. Wolf, "Measuring the Mixing Time of a network", In *Proc. 2015 IEEE Conference on Computer Communications (INFOCOM)*, May 2015.
11. X. Foukas, D. Loukatos, K. Kontovasilis and H. Marques, "Energy Requirements of Secure Vertical Handover Operations in the 802.21a Framework", In *Proc. IEEE CAMAD 2014*, Dec 2014.

## PROFESSIONAL SERVICE

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ACM WiNTECH 2018	Technical Program Committee
IEEE EuCNC 2017-2018	Technical Program Committee
GIIS 2018	Technical Program Committee

Reviewer for journals including IEEE/ACM Transactions on Networking, IEEE JSAC, IEEE Transactions on Wireless Communications, IEEE Transactions on Communications

## HONORS AND AWARDS

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| <b>2017</b> | <b>ACM MobiCom'17</b> , Best demonstration award for "Orion: A RAN Slicing System"   |
| <b>2017</b> | <b>BT</b> , Finalist at Lime Micro Hackathon organized by the BT Infinity Lab for "Orion: RAN Slicing System over LimeSDR" (One of the 8 finalists out of 60 registrants)        |
| <b>2017</b> | <b>MSN 2017 UK Academic Meeting on Systems and Networks</b> , Received the Brendan Murphy Prize as an outstanding UK PhD researcher in the networks and systems areas.           |
| <b>2015</b> | <b>CNSM 2015</b> , Received student travel grant for presenting the paper titled " <i>Exploiting Short-Range Cooperation for Energy Efficient Vertical Handover Operations</i> " |
| <b>2012</b> | <b>Imperial College London</b> , Received departmental scholarship on academic distinction by the Department of Computing  |
| <b>2007</b> | <b>AUEB</b> , Award for high performance in the national wide exams for college admission by the Department of Informatics (ranked 4 <sup>th</sup> )                             |

## COMPUTER SKILLS

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- **Programming Languages:** C/C++, Java, Python, Matlab, SQL, Bash, Javascript, Latex
- **Operating Systems:** Linux, FreeBSD, MacOS, Windows

- **Virtualization Platforms/Tools:** OpenStack, Docker, KVM, ETSI OSM, Juju Charms
- **Network Simulators:** NS-3, OMNeT++

## LANGUAGES

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<b>Greek</b>	Native Speaker
<b>English</b>	Fluent – Certificate of Proficiency in English, University of Cambridge
<b>German</b>	Intermediate – Mittelstufe
<b>French</b>	Basic

## OTHER ACTIVITIES

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- Main developer of the open source FlexRAN project for Software-Defined Radio Access Networks
- Contributor to the OpenAirInterface open source project, writing code for the MAC and the RRC layer of the RAN