Jon Larrea

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INTERESTS	**Mobile Networks and Computer Networking**

EDUCATION

Ph.D. in School of Informatics at *The University of Edinburgh*　　　　　Jan 2021 – Present
　　Topic: Towards Future Mobile Networks: From Cloud Native Systems to Intelligent Access

MSc by Research in School of Informatics at *The University of Edinburgh*　　Dec 2019 – Dec 2020
　　Program: ICSA (Comp. Architecture, Compilation System Software, Networks Communication)
　　Thesis: Towards Scalable and Realistic Emulation of Mobile Radio Access Networks for Core Network Evaluation

B.S. in Polytechnic School at *Autonomous University of Madrid*　　　　Sep 2015 – Jun 2019
　　Program: Computer Science and Engineering
　　Thesis: Ad hoc modular OS design for high-performance environments

WORK EXPERIENCE

Research Intern, Microsoft Research, Cambridge, UK　　　　　　Jun 2022 – Sep 2022

Computer Communications and Networks, University of Edinburgh　Spring (2020, 2021 and 2022)
　　Roles: Teaching Assistant and Marker

AR software engineer, VPULab Research Group, Madrid, Spain　　　　Apr 2019 – Aug 2019

Malware analyst, S21Sec, Madrid, Spain　　　　　　　　　　　Sep 2018 – Dec 2018

RESTFul Services developer, Knowledge Engineering Institute, Madrid, Spain　Jun 2016 – Sep 2016

PUBLICATIONS

Jon Larrea, Mahesh K. Marina and Jacobus Van der Merwe, *"Nervion: A Cloud Native RAN Emulator for Scalable and Flexible Mobile Core Evaluation"*, in ACM International Conference on Mobile Computing And Networking (**MobiCom'21**), Feb 2022.

Rupendra Nath Mitra, Mohamed M. Kassem, **Jon Larrea** and Mahesh K. Marina, *"CUPS Hijacking in Mobile RAN Slicing: Modeling, Prototyping, and Analysis"*, in IEEE Conference on Communications and Network Security (**CNS**), Oct 2021.

Jon Larrea and Antonio Barbalance, *"The serverkernel operating system"*, in ACM International Workshop on Edge Systems, Analytics and Networking (**EdgeSys'20**), Apr 2020.

AWARDS SCHOLARSHIPS

ACM Student Research Competition　　　　　　　　　　　　　　　Mar 2022
1st place in ACM SRC at MobiCom 2021.

PhD Studentship　　　　　　　　　　　　　　　　　　　Jan 2021 – Dec 2023
School of Informatics, The University of Edinburgh

MSc by Research Studentship　　　　　　　　　　　　　　Dec 2019 – Dec 2020
School of Informatics, The University of Edinburgh

Research Scholarship　　　　　　　　　　　　　　　　　　　　　2019
Autonomous University of Madrid

Madrid Merit Scholarship　　　　　　　　　　　　　　　　　2018 – 2019
Community of Madrid

SKILLS

Areas of expertise
　　Networking, Systems design and implementation, Mobile Networks, Network programing, Linux

Languages
　　C, C++, Python, Java, C#, Assembler 8086, ARM Assembly, Makefile, Bash Script

SELECTED PROJECTS

Nervion
　　A cloud-based RAN emulator that supports the generation of control and data plane loads for 4G and 5G networks using a novel design that enables scalability and flexibility.

Serverkernel
　　Single space-address operating system for Raspberry Pi that allows the user to offload computations and get the result.

REFERENCES

Mahesh K. Marina