Andrea Ferlini

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EDUCATION

University of Cambridge | PhD Computer Science
January 2019 — January 2022

- Working in mobile systems, wearables, and deep learning.
- Graduate Student at Churchill College, fully funded though a donation of Nokia Bell Labs Cambridge.
- Supervised by Prof Cecilia Mascolo. Investigating wearable technology (earable) as sensing platform to understand those human behavioural cues that describe the way people focus. Building a device with a commercial off-the-shelf design to screen people hearing condition and let people with hearing disabilities have the same perception of the reality as non-impaired people.
- Attended IEEE ICASSP '19, ACM SIGCOMM '19, ACM UbiComp '19.

University of California, Los Angeles (UCLA) | Visiting Researcher
June 2018 — July 2018

- Worked on vehicular networks and connected vehicles with Prof Mario Gerla.
- Volunteered at ACM MobiHoc '18.

University of Trento & Sorbonne University, UPMC
| EIT Digital Double MSc Telecommunication Engineering & Computer Science
September 2016 — October 2018

- 110H/110, class honours (rank 1/140 at Sorbonne University).
- Attended EIT Digital Summer School on Big Data Analytics hosted by Kungliga Tekniska Högskolan (KTH).
- Attended ACM MobiSys '18.
- Dissertation: *"Car-Fi applications and analysis"* — supervised by Prof Giovanni Pau.
  - Worked on connected vehicles (V2X), performance measurement for near-continuous network mobility scenarios (intermittent, high-speed-mobility connectivity).

University of Trento | BA Information and Business Organization Engineering
September 2013 — October 2016

- 102/110.
- Dissertation: *"Analysis and automation of the payment process for Solidarity Purchase Groups"* — supervised by Dr Adolfo Villafiorita.
  - Investigated ICT adoption for social and economic development, sustainability, food waste and recovery. UI design and development of a food eCommerce in Ruby and Ruby on Rails.

WORK EXPERIENCE

Sorbonne University - LIP6 NPA | Research Engineering
March 2018 — January 2019

- Prototyped a modified BitTorrent Client to provide a reliable transport and application layer to enable V2X communications. Tested in the wild, we were able to download up to 1.6 GB in less than 15 minutes accessing only urban community WiFi hotspots. Designed a measurement tool to analyze the performances of TCP with intermittent, high-speed-mobility connectivity (spoiler: TCP is not the protocol you want to use).
- Project used C and Python.

Fondazione Bruno Kessler - FBK | Software Engineering Intern
February 2016 — September 2016

- Studied and analyzed the feasibility of a software project, developed an eCommerce (front and back-end).
- Project used Ruby and Ruby on Rails.

FCS Solutions | Network Engineering Intern
July 2015 — September 2015

- Configured VLANs in a production environment, wrote ACLs and firewall configuration.

SKILLS

Languages	Experienced: C, C++; **Competent**: Python, SQL; **Familiar**: Bash, Java, Ruby
Tools / Software	Git, Common Unix Tools, Android, Linux, MacOS, Keras & PyTorch[1]

RECOGNITION

- Awarded the Student Distinction Prize by Sorbonne University (October 2018) as best performing MSc student in their second year studying Computer Science.
- Awarded a Merit Scholarship (M7) by EIT Digital as distinction award during the 1st year of my MSc.
- Winner of Start Up Laboratory (SUL) as CTO of FlyingScarecrows.
- Awarded a Scholarship (C4) by EIT Digital every year during my MSc.
- Awarded a Merit Scholarship by Univeristy of Trento as distinction award during my Bachelor's degree.

OTHER

- Activities include cycling, running, playing football, and bouldering.
- Part of the Churchill College MCR committee from September 2019.
- Attended, as CTO of FlyingScarecrows, VT KNOWLEDGEWORKS, a start up competition organized by Virginia Polytechnic Institute and State University (21/08/17 - 25/08/17).
- Digital photographer with knowledge in Adobe Lightroom, Photoshop, and Illustrator.
- I speak fluently Italian and English (IELTS certification). I have an intermediate level in French.

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[1]Currently learning Keras and PyTorch for my PhD research

PUBLICATIONS

- Head Motion Tracking Through in-Ear Wearables, Andrea Ferlini, Alessandro Montanari, Cecilia Mascolo, Robert Harle, Proceedings of 1st International Workshop on Earable Computing (EarComp'19 c/o UbiComp'19)
- Corner-3D: a RF Simulator for UAV Mobility in Smart Cities, Andrea Ferlini, Wei Wang, Giovanni Pau, ACM SIGCOMM 2019 Workshop on Mobile AirGround Edge Computing, Systems, Networks, and Applications (MAGESys'19)
- Leader-Follower Formations on Real Terrestrial Robots, Alexandru Solot, Andrea Ferlini, ACM SIGCOMM 2019 Workshop on Mobile AirGround Edge Computing, Systems, Networks, and Applications (MAGESys'19)
- In-Ear Aid for Speech Separation, Andrea Ferlini, Cecilia Mascolo, UK Mobile, Wearable and Ubiquitous Systems Research Symposium (MOBIUK '19).
- C-Continuum: Edge-to-Cloud Computing for Distributed AI, Andrea Ferlini, Davide Aguiari, Jiannong Cao, Song Guo, Giovanni Pau, 2019 IEEE Conference on Computer Communications (INFOCOM '19).
- Submission under review at IEEE International Conference on Pervasive Computing and Communications (PerCom 2020) — Submitted on September 20th.
- The work done while I was a researcher at Sorbonne University will be submitted at ACM SIGCOMM 2020 in January.