

# João Pedro Fonseca

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## Experience

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### March 2024 - Present, Iquadrat Informatica S.L.



SENIOR RESEARCHER

Hybrid Work, Barcelona, Spain

In this position, I design, develop, and integrate telecom solutions for European-funded R&D projects: Horizon 2020(5G-ERA) and Horizon Europe(AC3, 6G BRICKS, 6G-INTENSE).

### March 2022 - Feb 2024, Capgemini Engineering



R&D CONNECTIVITY & NW ENGINEER

Hybrid Work, Porto, Portugal

In this position, I gained extensive Experience designing, developing, and integrating solutions for Telecom R&D projects. Proficient in editing and writing project deliverables. I led and managed work packages as the designated work package leader. Projects: P2020 (OREOS, FLOYD), H2020 6G BRAINS, Next Generation EU PRR Route 25, Horizon Europe SNS JU Imagine B5G. Furthermore, I analyzed technical specifications (e.g. 3GPP, ETSI, TM FORUM, 5GAA) for architecture definition and led the implementation of compliant solutions. This position required me to mentor students pursuing their Master's theses at Capgemini Engineering. I was also a project Manager for internal projects, overseeing teams of five to eight individuals developing/testing custom telecom solutions.

### October 2019-February 2022, Instituto de Telecomunicações



RESEARCH FELLOW

Aveiro, Portugal

In this position, I had to design, develop, and integrate a solution for network slice orchestration across administrative domains under the H2020 5Growth Project—writing and revising the project deliverables. For that, it was essential to analyze technically ETSI and 3GPP Specifications to enhance the Network Slicing tool utilized in the project for integration with ICT-17 platforms. Open source contributions to ETSI OSM MANO release 9 & 10 Mentor bachelor and master students to enhance their proficiency in interacting with the OSM software stack.

## Education

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### 2021-Present, Ph.D., Universities of Minho, Aveiro and Porto



MAP DOCTORAL PROGRAM IN COMPUTER SCIENCE

Aveiro, Portugal

PhD Thesis title: *Vertical-aware and Dynamic System Orchestration*. The work being done in this thesis is hosted by Instituto de Telecomunicações and was done in collaboration with Capgemini Engineering(Feb 2022- Mar 2024).

### 2013 -2021, Msc. & Bsc. , Universidade de Aveiro



INTEGRATED MSc. IN COMPUTER AND TELEMATICS ENGINEERING

Aveiro, Portugal

- Master Thesis on *5G Interdomain Orchestration Mechanisms for Flexible Vertical Services Deployment*, Grade 17/20.

## Publications

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H-INDEX: 3 | RESEARCHGATE: [LINK](#) | GOOGLE SCHOLAR: [LINK](#) | ORCID: [LINK](#)

## Awards

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Dec 2020 **Outstanding Technical Contributor(Release 9)**, ETSI OSM Community

## Opensource Projects

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### ETSI-OSM(Open Source MANO) [LINK](#)

CONTRIBUTOR



Patch bugs present on the Open Source NFV Management and Orchestration (MANO) software stack and related to the CI/CD solution

### Awesome Hacking Locations [LINK](#)

MANTAINER

List of hacking spots by country and city, with power and Wi-Fi availability. Inspired by Awesome Lists.

## Technologies

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### Development & Operations

Bugtracking and Development: Bugzilla, Gerrit, Jenkins, and Git Deployment and Automation with Ansible, Juju Charms(Reactive and Native) and Bash scripting Virtualization and Orchestration: Kubernetes, Docker and Docker-Compose, LXC, Openstack and Proxmox Experience using  $\text{\LaTeX}$ for technical writing.

### Networking and Monitoring

Experience on Network analysis and monitoring using different tools(Wireshark, nmap, mtr, iperf). Experience using DNS Security tools.

### Linux/Unix

Experience using different Linux Distros. Arch-based, Debian-based, RHEL-based. Experience using different Display servers.

## Languages

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PORTUGUESE: NATIVE| ENGLISH: FLUENT, C1 | OTHERS: FRENCH, SPANISH, RUSSIAN

## Volunteering

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### 2017-Present, GLUA - Grupo de Linux da Universidade de Aveiro



SENIOR MEMBER AND FORMER COORDINATOR

- Providing Linux Technical to the university community, including driver/package conflict management, and kernel compilation.
- As the maintainer for the GLUA's FOSS Public Mirror Service at [glua.ua.pt/pub](http://glua.ua.pt/pub), I set up nginx, rsync, etckeeper, and automatic notification emails for service failures. Additionally, I developed the Mirrors webpage using PHP.
- Human resources management

### ENEI - National Meeting of Computer Science Students



ORGANIZING COMMITTEE(2014,2016) AND AMBASSADOR(2018,2019)

### 2014-2017, Núcleo de Estudantes de Engenharia de Computadores e Telemática-NEECT



MEMBER OF THE EDUCATION AND ACADEMIC SECTOR