

**Personal Information**

Name	Flávio Silva Meneses
Address	Aveiro, Portugal
E-mail	contact@fmeneses.com
Webpages	<a href="https://fmeneses.com">https://fmeneses.com</a> <a href="pt.linkedin.com/in/flaviosmeneses">pt.linkedin.com/in/flaviosmeneses</a>
Nationality	Portuguese



**Resume**

In order to be able to develop a more comprehensive vision of the telecommunications world, back in 2006, I decided to leave the mainstream school curriculum and to finish my high school studies in an **Electronics and Telecommunications vocational course in a trade school**. During the course, classified as level III in the European Qualifications Framework, I had the opportunity to work as an intern in two different companies, both in different sectors, namely, **Web development** and **Telecommunications**.

My enrolment in extracurricular activities, such as being federated in football, futsal and basketball, as well as being part of several scholar organizations before and after the admission to university, have certainly contributed to make me a sociable and proactive person.

In 2009, I enrolled in the **Master of Science (MSc) in Electronics and Telecommunications Engineering** course at the **University of Aveiro**, and graduated in 2015. During this time, I became part of the **Núcleo Cultural Ilhas de Bruma** for three years, being the coordinator for two years. In the last year as coordinator, a new affiliation of the students' association was created, and I became one of the co-founders of the **Núcleo de Estudantes Madeirenses e Açorianos**. While doing my Master Thesis, I joined the **Telecommunications and Networking Group (TN-Av)** of the Instituto de Telecomunicações of Aveiro (IT-Av), as a scientific researcher. Upon graduation, I remained working at IT-Av, and became a **PhD student**, by enrolling in **Computer Science Doctoral Program (MAP-i)**.

During the PhD, I have been working on the next generation of networks, with special focus on **Network Slicing** and the use of **Software Defined Networking (SDN)** and **Network Function Virtualization (NFV)** technologies to tackle the upcoming network challenges. This gave me the opportunity to collaborate in national and international projects, and contribute in scientific conference proceedings, journals and book chapters. I also evolved in terms of dissemination of technological concepts not only in conference, workshops and demonstrations, but also as a **Teacher Assistant** of an undergraduate course (**Java programming**) and as **Visiting Assistant Professor** of an Information Technologies course. In addition, I have collaborated in the **supervision of master thesis** related to the SDN and NFV fields.

Currently, I am **finishing my PhD** and looking forwards for the new opportunities to keep contributing towards the developments of the telecommunication industry.

## Professional Experience

Sep 2014 – present      **Researcher**  
ATNoG - IT Aveiro  
**Research fields:** Network Slicing, OpenFlow, SDN, NFV, Wireless, Mobility

Sep 2018 – Feb 2019      **Visiting Assistant Professor**  
Escola Superior de Aveiro Norte (ESAN - University of Aveiro)

Fev 2016 – Jul 2016      **Teaching Assistant**  
University of Aveiro

Previous Jobs

May 2009 - Jul 2009  
**Telecommunications Technician**  
Internship, Zon Açores

May 2008 - Jul 2008  
**Web Developer**  
Internship, Via Oceânica, Lda

## Academic Activities

**Visiting Assistant Professor**      - Aplicações Informáticas, University of Aveiro, Portugal (2018/2019)

**Teaching Assistant**      - Programação II (Java Programming), University of Aveiro, Portugal (2016)

**Dissertation collaborator**      - *“Virtualizador de equipamento de rede doméstico na cloud 5G (vCPE)”*, Tiago Vieira, University of Aveiro, Portugal (2019)  
- *“Redes Definidas por Software e Funções de Rede Virtualizadas para Comunicações Críticas e Fiáveis em Ambientes 5G”*, João Filipe, University of Aveiro, Portugal (2018)  
- *“Implementação de Serviços em Ambientes Multi-Access Edge Computing”*, David Santos, University of Aveiro, Portugal (2018)  
- *“Offloading Mechanisms for Mobile Networks using SDN in Virtualized Environments”*, Rui Silva, University of Aveiro, Portugal (2018)  
- *“Diferenciação de Tráfego IoT em redes Software Defined Networking”*, Sofia Marques, University of Aveiro, Portugal (2018)  
- *“SDN Controllers Evaluation”*, Pedro Bispo, University of Aveiro, Portugal (2017)

## Projects

Sep 2018 – present	<b>5GContact - 5G CONText-Aware Communications optimization</b> Webpage: <a href="https://5gcontact.av.it.pt">https://5gcontact.av.it.pt</a> <b>Research fields:</b> Network Slicing, Context Awareness, eHealth.
Sep 2018 – present	<b>Mobilizador 5G</b> Webpage: <a href="https://5go.pt">https://5go.pt</a> <b>Research fields:</b> Network Slicing, Software Defined Networks (SDN), Network Function Virtualization (NFV).
Jul 2017 – present	<b>SOCA - Smart Open Campus</b> Webpage: <a href="http://soca.av.it.pt">http://soca.av.it.pt</a> <b>Research fields:</b> Network Slicing, Software Defined Networks (SDN), Network Function Virtualization (NFV).
Sep 2014 - present	<b>AMazing</b> Webpage: <a href="http://amazing.atnog.av.it.pt/">http://amazing.atnog.av.it.pt/</a> <b>Contributions:</b> Hardware maintenance and Software support.
From: Jan 2017 To: Dec 2017	<b>CONFIG Reloaded</b> Webpage: <a href="https://www.5g-control-plane.eu/">https://www.5g-control-plane.eu/</a> <b>Research fields:</b> Network Slicing, SDN, NFV, Mobile Networks.
From: May 2016 To: Dec 2016	<b>Control Networks in Five G (CONFIG)</b> Webpage: <a href="https://www.5g-control-plane.eu/">https://www.5g-control-plane.eu/</a> <b>Research fields:</b> Network Slicing, SDN, NFV, Mobile Networks.
From: Nov 2014 To: Nov 2015	<b>Integração e Mobilidade em Redes 3GPP-Wifi (IM3W)</b> Webpage: <a href="https://atnog.av.it.pt/content/im3w-integra-o-e-mobilidade-em-redes-3gpp-wifi">https://atnog.av.it.pt/content/im3w-integra-o-e-mobilidade-em-redes-3gpp-wifi</a> <b>Research fields:</b> Software Mobility Wireless Mechanisms

## Publications

- 2019

F. Meneses, R. Silva, D. Corujo, A. Neto, R. L. Aguiar, "Dynamic Network Slice Resources Reconfiguration in Heterogeneous Mobility Environments", *Internet Technology Letters*, Wiley, May 2019

F. Meneses, R. Silva, D. Santos, D. Corujo, R. L. Aguiar, "An Integration of Slicing, NFV and SDN for Mobility Management in Corporate Environments", *SI on Network Slicing: trends, research and standardization*, Transactions on Emerging Telecommunications Technologies, Wiley, April 2019

J. B. Filipe, F. Meneses, A. Rehman, D. Corujo, R. L. Aguiar, "A Performance Comparison of Containers and Unikernels for Reliable 5G Environments", *DRCN 2019 Special Session on Disaster Resilience of Communication Networks*, Coimbra, Portugal, Mar 2019

F. Meneses, R. Silva, D. Corujo, R. L. Aguiar, "Micro and Macro Network Slicing: an experimental assessment of the impact of increasing numbers of slices", *Journal of Wireless Personal Communications*, Springer, Mar 2019

---

- **2018**

F. Meneses, D. Corujo, A. Neto, R. L. Aguiar, "SDN-based End-to-End Flow Control in Mobile Slice Environments", *IEEE Workshop on Mobility Support in Slice-based network control for heterogeneous environments (MOBISLICE) (IEEE NFV-SDN workshops)*, Verona, Italy, Nov 2018

F. Meneses, R. Silva, D. Santos, D. Corujo, R. L. Aguiar, "Using SDN and Slicing for Data Offloading over Heterogeneous Networks Supporting non-3GPP Access", *Proc. IEEE 29th Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)*, Bologna, Italy, Sep 2018

F. Meneses, C. Guimarães, D. Corujo, R. L. Aguiar, "SDN-based Mobility Management: Handover Performance Impact in Constrained Devices", *Proc. 9th IFIP International Conference on New Technologies, Mobility & Security (NTMS 2018)*, Paris, France, Feb 2018

F. Meneses, C. Guimarães, D. Corujo, R. L. Aguiar, "Experimental wireless network deployment of software defined and virtualised networking in 5G environments", *Chapter in Emerging Wireless Communication & Network Technologies: Principle, Paradigm and Performance*, Springer, Aug 2018

F. Meneses, C. Guimarães, D. Corujo, R. L. Aguiar, "Deviceless Communications: A cloud-based video delivery", *Journal of Wireless Personal Communications*, Springer, Feb 2018

F. Meneses, D. Corujo, C. Guimarães, R. L. Aguiar, "Handover Initiation Comparison in Virtualised SDN-based Flow Mobility Management", *IEEE Symposium on Computers and Communications (ISCC)*, Natal, Brasil, July 2018

- **2017**

F. Meneses, D. Corujo, C. Guimarães, R. L. Aguiar, "An abstraction framework for flow mobility in multi-technology 5G environments using virtualization and SDN", *IEEE Conference on Network Softwarization (NetSoft)*, Bologna, Italy, July 2017

- **2015**

F. Meneses, D. Corujo, C. Guimarães, R. L. Aguiar, "Extending SDN to End Nodes Towards Heterogeneous Wireless Mobility", *Proc. 2015 IEEE International Workshop on Advances in Software Defined Radio Access Networks and Context-aware Cognitive Networks (SDRANCAN)*, San Diego, CA, USA, Dec 2015

F. Meneses, D. Corujo, C. Guimarães, R. L. Aguiar, "Experimental Evaluation of SDN-based End-to-End Mobility Management in Wireless Environments", *Proc. Conferência sobre Redes de Computadores (CRC)*, Évora, Portugal, Nov 2015

F. Meneses, D. Corujo, C. Guimarães, R. L. Aguiar, "Multiple Flow in Extended SDN Wireless Mobility", *Proc. 2015 European Workshop on Software Defined Networks (EWSDN)*, Bilbao, Spain, Sep 2015

---

## Awards

- **Best Paper Award**

F. Meneses, C. Guimarães, D. Corujo, R. Aguiar, Best Paper Award (Mobility Track), 9th IFIP International Conference on New Technologies, Mobility & Security (NTMS 2018), for the work "SDN-based Mobility Management: Handover Performance Impact in Constrained Devices", in Paris, France, 01-02-2018s

---

---

## Workshops, Demos and Posters

---

- **2018**

Session Chair: IFIP International Conference on New Technologies, Mobility & Security (NTMS 2018), Paris

- **2017**

Poster (Speaker): “5G-VCoM - 5G Virtual Cloud Mobility”, Research Day, Aveiro, Jun, 2017

Poster (Speaker): “CONFIG - 5G Control Plane”, Research Day, Aveiro, Jun, 2017

Demo (Speaker): “A Cloud-based Mobile Video Delivery Mechanism”, Aveiro, Portugal, Mar 2017

Workshop (Participant): *IEEE 5G Lisbon Summit*, Lisbon, Portugal, Jan 2017

Seminar (Participant): *A Rede Temática de Comunicações Móveis (RTCM)*, Lisbon, Portugal, Jan 2017

- **2016**

Workshop (Organizing Committee): “Reflection on Mobile Networks Architectures”, *Control Networks in Five G (CONFIG) Workshop*, Lisbon, Portugal, Sep 2016

Poster (Speaker): “SDN-based End-to-End Mobility Management”, *Encontro Ciência 2016*, Lisbon, Portugal, Jul 2016

Summer School (Participant): “Advanced Scientific Computing”, *Texas Advanced Computing Center (TACC)*, Braga, Portugal, Jun 2016

Seminar (Participant): “Artificial Intelligence methods used in IBM’s Watson”, *Department of Computer Science - The University of Texas at Austin*, Porto, Portugal, Jun 2016

Seminar (Participant): “Next Generation Clouds”, Aveiro, Portugal, May 2016

- **2015**

Poster (Speaker): “SDN-based End-to-End Mobility Management in Wireless Environments”, Proc. *Conferência sobre Redes de Computadores (CRC)*, Évora, Portugal, Nov 2015

Seminar (Speaker): “Future Network Challenges”, *A Rede Temática de Comunicações Móveis (RTCM)*, Porto, Portugal, Jun 2015

---

## Academic Degrees and Professional Knowledge

Date September of 2015 to Sep of 2019 (expected)  
Educational Organization University of Aveiro, University of Minho and University of Porto  
Assigned Qualification **Computer Science, PhD - ( MAP-i)**  
Courses Network Analysis, Advanced Information Extraction, Software Testing, Cryptography and Information Security.

Date October of 2016 to December of 2016  
Educational Organization Twofold  
Assigned Qualification **Pedagogical Aptitude training course - IEFP certified trainer**

Date September of 2009 to July of 2015  
Educational Organization University of Aveiro – Electronics, Telecommunication and Informatics Department  
Campus Universitário de Santiago  
3810 – 193 Aveiro  
Assigned Qualification **Electronics and Telecommunication Engineering, MSc**  
Master Thesis Theme Future network challenges  
Thesis fields: **SDN/OpenFlow, Mobility, Wireless**

### **Vocational Course:** from 2006 to 2009

Escola Profissional da Santa Casa da Misericórdia de Angra do Heroísmo, Azores, Portugal

Course: **Electronics and Telecommunications - Level III**

**Final project theme:** Design a wireless network for a school campus

### **English Courses**

Department of Languages and Cultures, University of Aveiro

Current level: **C1** (2016)

**B2.2 level** (2015) | **B2.1 level** (2014) |

**Technical English: Telecommunications** (2013)

## Personal Aptitudes and Competences

### Languages

Native	Portuguese
Foreign Language	European Level (*)
English	Professional working proficiency (C1)
French	Elementary proficiency (A1)
Spanish	Elementary proficiency (A1)

### Technical Aptitudes and Competences

Programing Languages	<b>Software and Scripting:</b> Java, C, Python, Bash <b>Web Development:</b> PHP,HTML/HTML5, CSS, JavaScript <b>Database Development:</b> MySQL
Frameworks and Platforms	<b>Productivity and Simulation:</b> LaTeX, Matlab, Omnet, Mininet <b>Version Control Systems:</b> Github, SVN <b>Network Tools:</b> Wireshark, Iperf, Tcpdump, NTP, Putty <b>Transport / Network Protocols:</b> OpenFlow, REST, RIP, OSPF, UDP, TCP, IP (v4/v6), MAC Layer <b>Real-Time Communication protocols:</b> XMPP, RTP <b>Cloud platforms:</b> OpenStack, Docker, ProxMox
Computer Skills	<b>Operating Systems:</b> Windows, Linux, Mac OS <b>Software:</b> MS Office, MS Project, MS SQL Server, Matlab, Oracle VirtualBox, VMWare, Workbench

### Extracurricular Activities

Sports	<b>Federated player:</b> futsal (2006-2009), football (2004-2005) and basketball (2002-2003)
Scholar organizations	<b>Coordinator and co-founder (2013-2014):</b> Núcleo de Estudantes da Madeira e dos Açores <b>Coordinator (2010-2013):</b> Núcleo das Ilhas de Bruma <b>Co-coordinator (2009):</b> Associação de Estudantes da EPSCMAH

Last update: May 15th, 2019