

# Eduardo Filipe Amaral Soares

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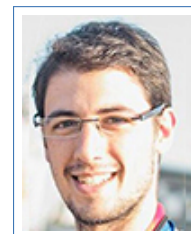
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## Academic Formation

2009–2014 **Network and Information Systems Engineer**, DCC, FCUP, Porto, Msc.  
Specialised in Communication Networks (with finish grade of 15, Level A)

## Professional Experience

- 2012 (7 months) Half-time research grant (BIC at IT, Porto): Building a reliable environment (using Multicast over WiFi 802.11) for data sharing, focused on medical data. Also known as "TelePalestra - A better way to share Knowledge";
- 2014 (4 months) Half-time research grant (BIC at IT, Porto): Setup Wi-Fi 802.11 in mode IBSS on Android devices. The result was an Android Application that enables this and inventory of the requirements for this application to work;
- 2014 - 2015 (7 months) Full-time research grant (at FEUP, Porto): Project I-CITY-ICT for Future Health under supervision of Pedro Brandão ([pbrandao@dcc.fc.up.pt](mailto:pbrandao@dcc.fc.up.pt)) and Rui Prior ([rprior@dcc.fc.up.pt](mailto:rprior@dcc.fc.up.pt));
- 2015 (3 months) Full-time research grant (at IT, Porto): Project Vital Responder 2.0 under supervision of Ana Aguiar ([aana@fe.up.pt](mailto:aana@fe.up.pt)) and Pedro Brandão ([pbrandao@dcc.fc.up.pt](mailto:pbrandao@dcc.fc.up.pt));
- 2015 - 2016 (7 months) Full-time research grant (at IT, Porto): Project S-DiaSelMan under supervision of Pedro Brandão ([pbrandao@dcc.fc.up.pt](mailto:pbrandao@dcc.fc.up.pt));
- 2016 - 2017 (15 months) Full-time research grant (at IT, Porto): Project VR2Market under supervision of Ana Aguiar ([aana@fe.up.pt](mailto:aana@fe.up.pt)).
- 2017 - 2018 (15 months) Full-time research grant (at FEUP, Porto): Project Generation.Mobi under supervision of Ana Aguiar ([aana@fe.up.pt](mailto:aana@fe.up.pt)).
- 2018 - 2018 (2 months) Full-time research grant (at FEUP, Porto): under supervision of Ana Aguiar ([aana@fe.up.pt](mailto:aana@fe.up.pt)).

## Papers

- 2014 Ana Aguiar, Eduardo Soares, Pedro Brandão, Tiago Magalhães, José Maria Fernandes, and Ilídio Oliveira. "Demo: wireless IP mesh on android for fire-fighters monitoring." In Proceedings of the 9th ACM MobiCom workshop on Challenged networks, pp. 89-92. ACM, 2014.
- 2015 Eduardo Soares, Pedro Brandão and Rui Prior. "Scalable Framework for Live Data Sharing through 802.11.", In Proceedings of the Mediterranean Conference on Information & Communication Technologies 2015, MedCT 2015 Volume 2, Springer, 2016.
- 2015 Eduardo Soares, Rafael Almeida, Cristina Oliveira, João Maia, Rui Prior, Miguel Coimbra and Pedro Brandão. "Usability of Health Kiosks for health self-assessment", In Proceedings of 10ª Conferência Nacional de Telecomunicações (ConfTele 2015), Aveiro, Portugal, 2015.
- 2016 Soares, E. S. and Oliveira, C.O and Maia, J.M. and Almeida, R.A. and Brandão, P. and Coimbra, M. and Prior, R. "Modular Health Kiosk for Health Self-Assessment", In IEEE workshop on ICT Solutions for eHealth ICTS4sHealth, 2016.
- 2017 Eduardo Soares, Pedro Brandão, Rui Prior and Ana C Aguiar, "Experimentation with MANETs of Smartphones." In Proceedings of Wireless Days, Porto, Portugal, 2017.

- 2018 Eduardo Soares, Ana Aguiar, Pedro Brandão and Rui Prior, "Service for MANET node self-configuration and communication." In 2018 11th IFIP Wireless and Mobile Networking Conference (WMNC).
- 2018 Eduardo Soares, Pedro Miguel Santos, Luis Pinto, Ana Aguiar, Pedro Brandão and Rui Prior, "Poster VoIP System for Bicycle Platoons." In 2018 IEEE Vehicular Networking Conference (VNC) (IEEE VNC 2018).

### Open Source Projects

- Android Ad-hoc Android application to enable ad-hoc on Android OS, a easy set-up and enabler to supported phones. Project available on GitHub.
- Android IP Manager Android library to setup Wi-Fi network configurations after API deprecation (Android 3.0). Project available on GitHub.
- AutoHostsClear Small script to clear known hosts of local IP addresses. Project available on GitHub.

## Computer Skills

### Programming languages

- Basic UML, Ocaml, Prolog
- Intermediate C#, C++, C, Javascript, Haskell, Perl, Javascript, SQL, PHP, R
- Expert Java, JavaFX, Android Development, Python, Linux Networking

### Miscellaneous

- Tools GIT, LaTeX, Android Studio, IntelliJ IDEA, Pycharm

### Other experiences

- **Android development:** more than 5 years of experience, building applications from scratch with usage of multiple activities, fragments, services and multi-threading. Also working outside the virtual machine using Super Administrator privileges;
- **Implementation of a ballot voting system in Java:** involving implementing RSA signatures, RSA ciphering and using Secure Sockets Layer (SSL);
- **Multi Operating Systems development:** developing applications and libraries that work on Android (Dalvik/ART) and Windows/Linux (on JVM);
- **Reliable Multicast:** created a solution for reliable multicast, with delivery ordered and guaranteed;
- **NetAPI for MANET:** framework to create and manage a MANET network in a RaspberryPi, with APIs for sending messages between nodes. The framework handled all the necessary setup, interaction with routing protocol, name resolution and messaging between nodes.
- **Audio Comms. in a Bike Platoon:** full setup of a MANET and Bluetooth audio capture and reception, encoding, transmission and reception via multicast using RPIs for a bike platoon.
- **Laboratory Assistant:** assistant at introduction to programming and embedded systems practical classes in the scholar year of 2017-2018.

## Languages

- Portuguese **Native speaker and writer**
- English **Good speaker and writer**

## Social Skills

- 2009 - Organization in a summer festival and member of the respective association (Mêda+, more info at medamais.pt of which I'm the manager and responsible);
- Present
- 2013 Monitor at summer school (Universidade Júnior 2013), teaching young teenagers programming in a fun and easy way using Scratch;
- (2 weeks)
- 2015 - 2018 Helped showcase the Department of Computer Science's work in the yearly event Mostra UP between 2015 and 2018.