

EU ERASMUS+Program
Higher Education Student and Staff Mobility
Call for Applications

Based on the framework of the EU ERASMUS+ Program, and the partnership established between

- and
- Aalto University, Finland
 - Saad Dahleb University, Blida, Algeria
 - University of Science and Technology Houari Boumediene, Algiers, Algeria
 - Ecole National Supérieur d'Informatique, Algiers, Algeria
 - Université Amar Telidji Laghouat, Laghouat, Algeria

The research group, led by Prof. Tarik Taleb, at the Communications and Networking Department, School of Electrical Engineering, Aalto University, Finland is soliciting applications from higher education students, master and doctoral students enrolled with the above Algerian institutions, willing to carry on Research Mobility to Aalto University. There are in total 13 master student positions and 8 doctoral positions. Successful master applicants will be granted mobility for 5 months (152 days) and successful doctoral applicants will be granted 3 months (92 days). Other benefits are listed below.

Context and Job description:

The successful applicants will be assigned R&D tasks relevant to the following projects:

- 1. Customized 5G mobile systems leveraging Software Defined Networking, Network Function Virtualization, and Cloud Computing**
- 2. Security in 5G mobile systems**
- 3. Drone-based wireless communications and Internet of Things**
- 4. Social network-based personalized over the top TV system**

The focus of the successful applicants will be on both algorithmic and practical issues relevant to their assigned tasks. Algorithm work and their operational efficiency will be implemented, tested and integrated into the overall systems of the respective projects.

The work will be carried out in Aalto University. For master students, this could count for their master theses in their original institutions. For doctoral students, depending on performance, co-tutelle agreement could be established for a joint doctoral degree between Aalto University and their original institution. The selected candidate will work within the research group of Prof. Tarik Taleb tarik.taleb@aalto.fi. Direct interactions with the project's industrial partners are also foreseen.

Candidates' profile:

The working language of the research group is English. Successful applicants shall demonstrate some proficiency of the language. The successful applicants should also meet some of the following criteria:

- Advanced knowledge of cloud architectures and virtualization techniques (e.g., OpenStack, Kubernetes, Docker, KVM, etc)

- Advanced knowledge of Software Defined Networking (SDN) technologies (e.g., OpenDayLight, ONOS, OpenFlow, etc)
- Advanced programming skills in Python, C, C++/Java,
- Advanced skills in database management (e.g., SQL as well as NoSQL ones - MongoDB)
- Hands on experience on microcomputers (e.g., Raspberry PI)

Conditions & Benefits:

- **Place:** School of Electrical Engineering, Aalto University, Espoo, Great Area of Helsinki, Finland.
- **Duration:** 5 months (152 days) for master students, 3 months (92 days) for doctoral students
- **Accommodation:** University student housing, upon availability
- **Travel expenses:** ~530 Euros (refund based on provided receipts, and according to the travelled distance - http://ec.europa.eu/programmes/erasmus-plus/tools/distance_en.htm)
- **Salary:** ~850€/month (tax-free)
- **Visa:** If needed, Aalto University will provide necessary documents to support visa applications. The applicants are responsible for applying and obtaining the visa by themselves.

Timeline:

1. **The next call for Algeria Global Mobility will be open Feb 27 - March 12, 2017. The call is targeted to PhD students only.**
2. We will evaluate the applications and make the selection by April 1st.
3. Our study coordinator sends the instructions for the selected students to submit the documents to online application system.
4. The online application for incoming exchange student will be open next time from 1st of April until 30th of April.
5. The admission letter and other documents for exchange will be send to the students.
6. Doctoral students can start in August 2017.

Application material:

Interested candidates should send the following documents to the two contacts listed below:

- Detailed CV including publications or previous projects carried out. Please, provide a link to the projects/documents to download rather than attach them to your application email.
- Transcripts
- Motivation letter (written in English)
- English Language Proficiency (corresponding level B2/Common European Framework of Reference for Languages) or a Recommendation Letter from an English Professor indicating the English level of the student
- Names and contact details of two referees, who are willing to provide detailed recommendation letters about the candidate.

Please send your application material via e-mail with the subject line “Erasmus+Aalto-Algeria Master (or doctoral) Mobility” to Mrs. Anita Bisi anita.bisi@aalto.fi and Prof. Tarik Taleb tarik.taleb@aalto.fi.

For any inquiries regarding the program, please feel free to contact Mrs. Anita Bisi anita.bisi@aalto.fi.