

## Two Post-doctoral Researcher Positions on “IoT security” and on “Non Orthogonal Multiple Access (NOMA) Techniques for B5G Networks”

### 1) Post-doc on “IoT Security”: **Reference ELIOT**

- **Starting date:** September / October 2019 (negotiable if necessary)
- **Full-time, 1.5-year fixed term contract, remuneration: 50 kEuros/year** (~2,200 Euros/month net salary) plus conference attendance and travel expenses to Brazil for project meetings.

**Description:** The post-doc will work on the project ELIOT “Enabling technologies for IoT” <https://eliot.ensea.fr/>, funded by the French National Research Agency (ANR), in collaboration with the Universities of Sao Paulo USP and PUC-Rio in Brazil. Applications are sought from international candidates with an outstanding academic background and expertise in at least one of the following areas:

- physical layer security, secret key generation at PHY
- localization-based authentication
- anomaly detection / hardware security
- IoT security

and related disciplines. Demonstrable mathematical skills and familiarity with IoT security standards will be an advantage. Experience in proposal writing will be an advantage.

### 2) Post-doc on “NOMA Techniques for B5G Networks”: **Reference eNiGMA**

- **Starting date:** September / October 2019 (negotiable if necessary)
- **Full-time, 2-year fixed term contract, remuneration: 50 kEuros/year** (~2,200 Euros/month net salary) plus conference attendance expenses to international venues.

**Description:** The post-doc will work on the “Paris Seine Excellence Initiative” funded project eNiGMA “NOMA schemes for fifth generation and beyond systems under security and delay constraints”. Applications are sought from international candidates with an outstanding academic background and expertise in at least one of the following areas:

- wireless communications and NOMA techniques
- discrete and convex optimization theory
- delay constrained systems / ultra-reliable low latency communications (URLLC)
- uplink strategies in massive machine type communications (mMTC)

Demonstrable mathematical skills are essential. Experience in proposal writing is highly desirable.

### About the opportunity and us

The two postdoctoral researchers will join the ETIS Laboratory UMR 8051 and will work under the supervision of Dr. Arsenia (Ersi) Chorti for the position “ELIOT” and Dr. Arsenia (Ersi) Chorti and Prof. Inbar Fijalkow for the position “eNiGMA”. Informal enquiries about these positions can be made by email to Dr. Arsenia (Ersi) Chorti [arsenia.chorti@ensea.fr](mailto:arsenia.chorti@ensea.fr). Both postdocs will be located at the École Nationale Supérieure de l'Électronique et de ses Applications (ENSEA), a reputable Engineering School (“Grande Ecole”) at the outskirts of Paris (line RER A, station Cergy Prefecture) in France.

### About you

Applicants must have (or be close to completion) a PhD degree in a relevant area, a good publication record and should be familiar with key engineering programming languages (e.g., MATLAB, Python, R, etc.). Strong interpersonal and communication skills, the ability to work effectively in a team, manage

resources and prioritise tasks to achieve project outcomes will be essential. A good knowledge of the English language is required. Knowledge of French is not a pre-requisite.

### How to Apply

**Application procedure:** Applications should include the following elements: 1) detailed CV, 2) one-page motivation letter, 3) two or three academic references. All applications must be submitted directly by email at [arsenia.chorti@ensea.fr](mailto:arsenia.chorti@ensea.fr). For applications for the post-doc ELIOT, the subject of your email should be “**Application for ELIOT post-doc**”, for applications for the post-doc eNiGMA the subject of your email should be “**Application for eNiGMA post-doc**”.

**Closing date:** 11:59 pm **5th July 2019** (GMT+1 Time Zone)

**Interviews** will be conducted in person (upon availability) or by phone / videoconference between **8-12 July 2019**.

We are committed to diversity and social inclusion. Applications from female candidates, people with disabilities and diverse backgrounds are encouraged.

We reserve the right not to proceed with any appointment.