Three Research Engineer Positions at LANEAS Group - CentraleSupélec

The Large Networks and Systems (LANEAS) Group at CentraleSupélec is looking for three research engineers (master or PhD degree) to work on the development of a software/hardware prototype on wireless edge caching, within the framework of prestigious European Research Council grants (namely ERC PoC Grant No 727682 CacheMire, and ERC Starting Grant 305123 MORE). The candidates are expected to focus on the development and implementation of the prototype where research activities are also encouraged. The following positions are available with 12 months of contract (with a possibility of extension):

One Research Engineer Position on Network Protocols

The successful candidate is expected to integrate caching and content delivery schemes into suitable protocol stacks with a cross-layer optimization approach. Required skills are summarized as follows.

- Master or PhD Degree in Electronic Engineering or Computer Science
- A gentle knowledge to wireless communications and networks
- Programming skills in C/C++ and libraries
- Experience on network protocols and stacks (HTTP, HTTPS, TCP/IP, DNS)
- Experience on web caching and content delivery networks is a plus.

One Research Engineer Position on Embedded Systems

The successful candidate is expected to design and integrate content caching schemes into set-top box prototype. Required skills are summarized as follows.

- Master or PhD Degree in Electronic Engineering or Computer Science
- A gentle knowledge to wireless communications and networks
- Proficiency with low-level development languages (C/C++)
- Experience on firmware design, operating systems, and embedded Linux
- Experience on tweaking/modifying WiFi boxes is a plus
- Experience on web caching and content delivery networks is another plus.

One Research Engineer Position on Web Development

The successful candidate is expected to implement a wireless edge caching API and integrate with high level content management systems for possible customers.

- Master or PhD Degree in Computer Science
- A gentle knowledge to wireless communications and networks
- Proficiency with web mark-up languages (HTML/CSS), JavaScript frameworks, and user interface design
- Experience on web development tools and frameworks in PHP, Python, or JAVA EE
- Experience on content management systems (Drupal/Wordpress) and component design is another plus.

About LANEAS

LANEAS is an international research group in CentraleSupélec, and is specialized in mathematical tools in large dimensions, antenna array and network signal processing, data mining, and wireless communications. The detailed activities of the group can be found at http://laneas.com.

About CentraleSupélec

CentraleSupélec is located at Gif-sur-Yvette (Paris area) and is one of the most prestigious engineering schools (Grandes écoles) in France with outstanding quality of students and faculty offering access to top-level education, research and industrial activities in the context of the Université de Paris-Saclay. The details can be found at http://centralesupelec.fr.

How to Apply

The applications should be submitted to the team members of platform:

- Dr. Kenza Hamidouche < kenza.hamidouche@centralesupelec.fr >,
- Dr. Ejder Bastug <<u>ejder@mit.edu</u>>,

including a complete CV, two possible references to contact and a short cover letter/email explaining expertise and research interests.