

Side Channel Visualizer

Internship - Pessac

Introduction

eShard is a technology company specializing in the security of mobile or connected objects: electronic chips, mobile applications or any other communicating object for which there is both the storage of personal data and the exchange of information. This applies to all parts of objects: from chips in semiconductors to mobile applications.

Our role is to provide our customers, designers or users of connected objects with the means to control cyber risk and to ensure that the objects integrate the right level of protection: understand the threat, carry out automatic checks, obtain the knowledge of attacks.

To do this, we have assembled a team of specialists, researchers who are experts in cryptography and security of mobile applications, and we offer our customers a range of tools and services: SaaS platform, software, technical training and security testing service.

In the context of IC Security, the Public Key Cryptography (PKC) algorithms have taken an important role in many applications. Compared to symmetric key algorithms, PKC is more computational intensive. **[Side Channel]** analysis has become a must to challenge devices claiming basic security. A Side Channel visualizer must now efficiently handle traces containing millions of samples while offering features such as trace annotation or definition of areas of interest to facilitate Side-Channel analyses.

As part of the development of our activity, we are recruiting an intern in our Security Expert team to improve our visualization software for a period of 6 months remunerated. Desired start date: February 2022.

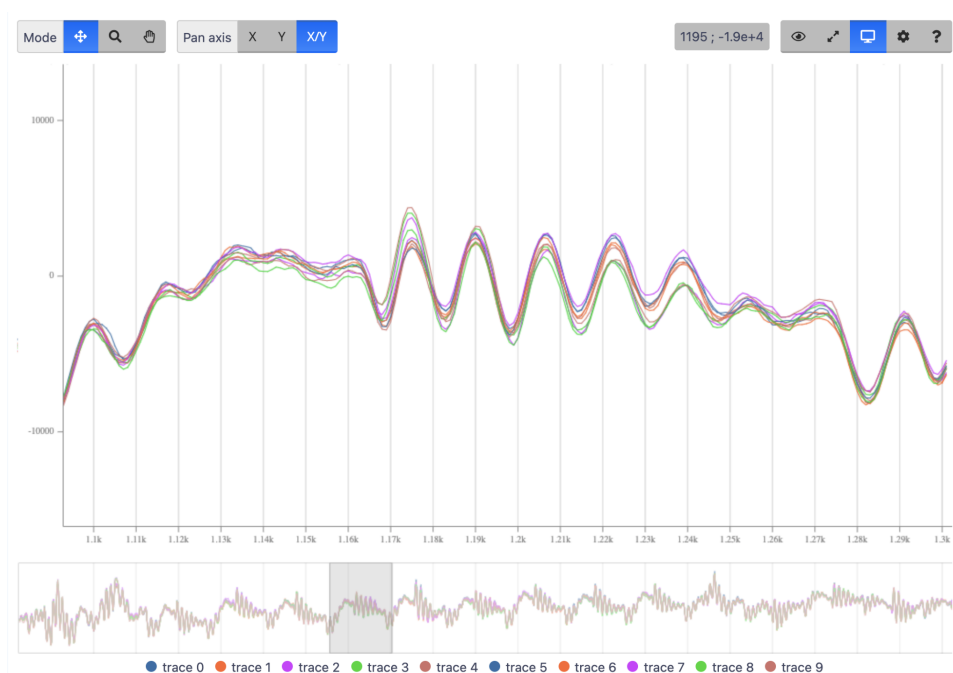
The position is based in Pessac (Bordeaux).

Job description

Responsibilities

Directly attached to the Chief Scientist, you will be in charge of the following missions:

- Work from a visualizer developed internally at eShard,
- Improve it and make it a JupyterLab 3.x extension.



You are

- You are preparing a master degree and are in your last year of study
- You have developed a particular interest in:
 - Python programming
 - HTML, CSS
 - JavaScript, Redux, Node, React
- You have some knowledge of Side-channel attacks, agile software development approach and GitLab
- You are curious by nature, responsive and have the spirit of initiative
- You demonstrate autonomy in your assignments

- You demonstrate good interpersonal skills that will allow you to work as a team effectively
- You have a good writing level in English

Your benefits

- Support from professionals in a cutting-edge and booming business sector
- Dynamic work environment within a young and friendly team
- High-performance work equipment
- Flexible working hours
- Space dedicated to talent development
- Mutual health insurance with good medical and dental coverage
- “Tickets restaurant” covered up to 50%
- Annual events, snacks and drinks

Interested?

Send your resume and motivation letter to:

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Get in touch



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