

Youssef El Housni

8 Rue du Parc
35510 Cesson-Sévigné
France
☎ +33 (0) 662968238
✉ youssef.housni21@gmail.com
born in Morocco the 23rd, February 1994



*"Imagination is more important than knowledge."
- Albert Einstein*

Education

- 2013–2016 **ENSEIRB-MATMECA School of engineering, Bordeaux, France.**
- Master of science in Signal Processing and Applied Mathematics.
 - Bachelor of science in Electronics.
- 2011–2013 **Moulay Al-Hassan, Tangier, Morocco.**
- Preparatory classes for the French national entrance exam for admission to the 'Grandes Ecoles' Science and Engineering schools.

Experience

- 10/2016–
present **R&D Engineer, Secure-IC, Rennes.**
- Elliptic curve cryptography: Theory and countermeasures.
 - Post-quantum cryptography (Isogenies, lattice and code-based cryptography) (*submitted a paper with a NIST PQC candidate*)
 - Stochastic models of a hardware TRNG (True Random Number Generator) (*patent pending and 2 papers in preparation*) and a hardware PUF (Physically Unclonable Function) (*Contribution to appear in ISO 20807 part 2*).
 - Video steganography and steganalysis on embedded devices.
 - Artificial intelligence for embedded security.
- 03/2016–
09/2016 **R&D Intern, Orange Labs, Rennes.**
- developed a state-of-the-art speaker recognition system based on machine learning techniques (*ranked second best internship*)
- 06/2015–
09/2015 **R&D Intern, Kansai University, Osaka, Japan.**
- developed an active noise control system for IRM machines under the supervision of professor Yoshinobu Kajikawa.

Computer skills

- Programming
and software C/C++, Python, Bash, Matlab, SageMath, \LaTeX .
- Operating
system Linux, MacOS, Windows.
- Versioning SVN, git.

■■■■ Patents

Patent pending Embedded dynamic statistical tests for TRNGs (joint with Florent Lozac'h). Secure-IC S.A.S.

■■■■ Submitted and working papers

submitted to CANS 2018 On the performance and security of $GF(2^N)$ computation for small N . (joint with Sylvain Guilley, Adrien Facon, Jean-Luc Danger, Sylvie Herbel, Edoardo Persichetti, Cheikh Thiecoumba Gueye, Ousmane Ndiaye and Alexander Schaub)

In preparation On the stochastic model of the metastable TRNG. (joint with Jean-Luc Danger and Sylvain Guilley)

■■■■ Interests

Football Played in the moroccan regional championship with Tetouan local team from 2000 to 2011.

Mathematics Participated twice in the National Mathematical Olympiads.