Youssef
El Housni
Applied Cryptographer

CONTACTS

📞 (+33) 06 62 96 82 38

✉ youssef.housni21@gmail.com

🌐 yelhousni.github.io

EDUCATION

PhD in cryptography
Ecole Polytechnique Paris
2019-2022

Msc in Electronics
INP Bordeaux
2014-2016

Bsc in Electronics
INP Bordeaux
2011-2014

Software

- Go, Rust, C, C++, Python, JavaScript, Solidity

- Linux, Git, LaTeX, Vim :)

Languages

- English, French, Arabic, Spanish

Misc

- Soccer 2000-2011 (national and regional)
- Mathematical olympiads 2007-2011

Hello, I'm Youssef

I am a French-Moroccan cryptographer interested in zero-knowledge proofs, elliptic curve and pairing-based cryptography. I like to contribute to open-source implementation projects and am enthusiastic about blockhain technology with focus on privacy-preserving solutions.

EXPERIENCE

2020- Present

Paris

Senior Applied researcher | ConsenSys

My work at ConsenSys consists in developing a zero-knowledge cryptography open-source ecosystem in Go. My focuses range from implementing novel and efficient primitives to building high-level protocols.

- github.com/ConsenSys/gnark-crypto
- github.com/ConsenSys/gnark

2018-2020

Paris

Senior Consultant | Ernst & Young

I worked on various projects ranging from financial services consulting to low-level cryptography implementation.

- Design and implementation of privacy-preserving blockchain-based solutions to financial services clients (Solidity, JavaScript).
- Contributed to Nightfall by optimising the low level cryptographic operations (C++, Rust)
- Contributed to Baseline by implementing the low level cryptographic operations (Rust)

2016-2018

Rennes

R&D engineer | SECURE-IC

I worked on various tasks related to harware and software implementations and mathematical modelling.

- Implementation of a video steganography toolkit in C for embedded devices.
- Implementation of countermeasures to side-channel attacks on curves cryptography in hardware (VHDL) and software (C).
- Conception of stochastic models and statistical tests for hardware TRNG and PUF.