OLIVIER ATANGANA

46 Rue saint Ouen, 14000 Caen, France

CAREER PROFILE

A highly motivated Ph.D. Candidate specializing in cryptocurrencies, with a solid background in electronic engineering, computer networks, and telecommunications. Proven ability in functional, security, and compliance testing, alongside a strong foundation in programming and machine learning. Aiming to leverage the expertise in blockchain technology and network security to contribute to innovative projects in the field of Central Bank Digital Currencies (CBDCs).

EDUCATION

Ph.D. Candidate in Cryptocurrencies | ENSICAEN Engineering School | January 2023 - Present

Thesis: Central Bank Digital Currency offline payments requirements Key Courses: Transaction Security, Cryptography Algorithms, Blockchain Risk Management, Al applied to security and privacy.

 Engineering Degree in Computer Science and Electronics | ESIREM Engineering School-Dijon | 2022

Specialty: Network Security and Quality

PROFESSIONAL EXPERIENCE:

- CBDC Consultant | FIME | September 2023 Present Strategized, designed, and roadmapped CBDC use cases for clients.
- Cryptocurrency Researcher | FIME | January 2023 Present Led the test tool development project for an offline CBDC wallet.
- IT & Telecom Project Engineer | Options Telecom | February 2022 July 2022 Developed customizable call flow dashboards tailored for decision-makers.
- IT Assistant Supervisor | University de Burgundy | April 2020 December 2021

Assisted students in leveraging computer tools and provided technical support

RESEARCH EXPERIENCE

- CBDC Conducted an in-depth CBDC documentation study.
- Designed features for an Offline CBDC e-wallet, considering the matrix of electronic currency and its security constraints.
- Implemented a secure communication protocol between two offline wallets.
- Synchronized offline transactions with the ledger.
- Integrated embedded AI within a CBDC e-wallet for fraud detection.

TEACHING EXPERIENCE

 Visiting Lecturer in Network Security | ENSICAEN Engineering School | September 2023 - Present

PUBLICATIONS

 "Securing Privacy in Offline Payment for Retail CBDC: A Comprehensive Framework"

Presented at Blockchain & Cryptocurrency Conference (B2C') 18-20 October 2023, Corfu, Greece

PROFESSIONAL ASSOCIATIONS

Digital Euro Association, Global Platform, FIDO Alliance/FEWG EU ID Wallet

RELEVANT SKILLS

Technical Skills

Blockchain:

Architecture and Design: Design and implementation of blockchain solutions.

Smart Contracts: Development, deployment, and optimization of smart contracts.

• Cryptographic Engineering:

Design and implementation of secure cryptographic protocols.

Performance optimization of cryptographic operations.

- **Programming**: C++, Python, Kotlin
- **Electronics**: Signal Processing, Wireless Communication
- Networks/Telecommunications Tools: NS2, NS3, Omnet++, GNS3, Packet Tracer, Ntopng, PRTG
- IT: Machine learning (Keras/Tensorflow/Pytorch), Virtualization (VMware Esxi, Virtual Box), Office tools (Latex, MS Office)

Communication skills

Effective Presentation: Proficient in conveying complex information in a clear and concise manner to diverse audiences.

Technical Communication: Adept at translating intricate technical concepts into comprehensible language for non-technical stakeholders

Interpersonal skills

- Collaborating with colleagues to develop and test research ideas
- Supporting the development of team members through assisting with their professional training to ensure competence and personal safety

RESEARCH INTERESTS

 Digital payment, DeFi, Open banking, Cloud, IoT, Security and Privacy in IT, Blockchain, Web3, Wireless Sensor Networks

CERTIFICATIONS

- CCNA I: Basics of network
- CCNA II: Available and Reliable Network
- CCNA III: Local security network, Wireless Network and security
- CCNA IV: Virtualization, Cloud Computing, IoT

OTHERS PROJECTS

- Guarantee of a security service in a Cloud Computing environment |
 September 2021-January 2022 Deployment of confidentiality and access
 control mechanisms in the OPENSTACK solution
- **IoT Service level guarantee** | September 2021-November 2021

REFERREES

- Lyes Khoukhi, Lyes.khoukhi@ensicaen.fr
- Morgan Barbier, Morgan.barbier@ensicaen.fr