

# WAZEN SHBAIR

Senior Blockchain Architect, VNX SA

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## EDUCATION

University of Lorraine

**PhD in Computer Science**

📅 Sep 2013 – May 2017    📍 Nancy, France

University of Cairo

**Master in Computer Science**

📅 Sep 2006 – May 2009    📍 Cairo, Egypt

Islamic University of Gaza

**Bachelor in Computer Engineering**

📅 Sep 2001 – Sep 2006    📍 Gaza, Palestine

## EXPERIENCE

Senior Blockchain Architect

**VNX SA**

📅 May 2022 – Present    📍 Luxembourg

- Develop and audit blockchain smart contracts
- Novel blockchains platforms integration and testing

Co-Founder

**WAVY MEET and NIRWatch (startups)**

📅 Jan 2021 – Present    📍 Luxembourg

Research Associate

**University of Luxembourg, SnT**

📅 May 2017 – May 2022    📍 Luxembourg

Research Engineer

**French National Centre for Scientific Research (CNRS)**

📅 July 2016 – May 2017    📍 Nancy, France

## TECHNICAL SKILLS

DiFi    Ethereum    Solidity    XRPL    NodeJS    JQuery  
REST API    MongoDB    Python    Flask    Go    Java  
C#    Laravel    AWS    Unit Testing    Android    IOS  
Docker    HSM    MQTT    Git    VueJS    React  
FeathersJS    UI

## FEATURED PROJECTS

**WAVYMEET - [www.wavymeet.com](http://www.wavymeet.com)**

A digital cardiac rehab platform. The project wins the Fit4Start 2022 edition competition in Luxembourg.

**PayStringSecure ([www.payid.lu](http://www.payid.lu))**

The winner of the Grand Prize of the PayString Hackathon 2020 of Ripple, USA

**Blockly2Hooks**

A platform for developing visually XRPL Hooks smart contract. Developed by NodeJS, WASM, and Google Blockly.

**DLT Application for KYC Process**

KYC results sharing via secure and trusted environment. Implemented using Ethereum, NodeJS, Docker, Go and AWS.

## FUNDING GRANTS

FNR, Luxembourg (12M)

**Digital Cardio Rehab Platform (WavyMeet)**

📅 Jan 2022 – Dec 2022

XRPL Grant, Ripple, USA (6M)

**Scratch2Hooks**

📅 Sep. 2021 – Jan 2022

SnT Acceleration Program, LU (6M)

**Remote Physical Therapy (OWL)**

📅 Mach 2021 – Sep 2021

FNR, Luxembourg (24M)

**Large-Scale Blockchain Testbed**

📅 Sep 2017 – Aug 2019

Erasmus EPIC Program, FR (36M)

**Full PhD Scholarship**

📅 Sep 2013 – May 2017

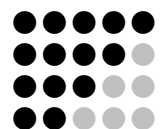
## LANGUAGES

Arabic

English

French

Luxembourgish



## PUBLICATIONS

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### PhD Thesis

- Shbair, Wazen M. (May 2017). *Service-Level Monitoring of HTTPS Traffic*). URL: <https://tel.archives-ouvertes.fr/tel-01649735>.

### Journal Articles

- Yakubov, Alexander et al. (2020). "BlockPGP: A Blockchain-based Framework for PGP Key Servers". In: *International Journal of Networking and Computing* 10.1, pp. 1-24.

### Conference Proceedings

- Trestioreanu, Lucian et al. (2023). "XRP-NDN overlay: Improving the Communication Efficiency of Consensus-Validation based Blockchains with an NDN Overlay". In: *NOMS 2023-2023 IEEE/IFIP Network Operations and Management Symposium*. IEEE, pp. 1-5.
- Scheidt, Flaviene et al. (2021). "Privacy-Preserving PayString Service". In: *2021 IEEE International Conference on Blockchain and Cryptocurrency (ICBC)*. IEEE, pp. 1-3.
- Shbair, Wazen, Eugene Gavrilov, and Radu State (2021). "HSM-based Key Management Solution for Ethereum Blockchain". In: *2021 IEEE International Conference on Blockchain and Cryptocurrency (ICBC)*. IEEE, pp. 1-3.
- Norvill, Robert et al. (2020). "A security and privacy-focused KYC data sharing platform". In: *Proceedings of the 2nd ACM International Symposium on Blockchain and Secure Critical Infrastructure*, pp. 151-160.
- Shbair, W. M., M. Steichen, et al. (2019). "BlockZoom: Large-Scale Blockchain Testbed". In: *2019 IEEE International Conference on Blockchain and Cryptocurrency (ICBC)*, pp. 5-6.
- Shbair, Wazen M et al. (2018). "Blockchain orchestration and experimentation framework: A case study of KYC". in: *NOMS 2018-2018 IEEE/IFIP Network Operations and Management Symposium*. IEEE, pp. 1-6.
- Steichen, Mathis et al. (2018). "Blockchain-based, decentralized access control for IPFS". in: *2018 IEEE International Conference on Internet of Things (iThings) and IEEE Green Computing and Communications (GreenCom) and IEEE Cyber, Physical and Social Computing (CPSCom) and IEEE Smart Data (SmartData)*. IEEE, pp. 1499-1506.
- Yakubov, A. et al. (2018). "A blockchain-based PKI management framework". In: *NOMS 2018 - 2018 IEEE/IFIP Network Operations and Management Symposium*, pp. 1-6.
- Shbair, W. M., T. Cholez, et al. (2016). "A multi-level framework to identify HTTPS services". In: *NOMS 2016 - 2016 IEEE/IFIP Network Operations and Management Symposium*, pp. 240-248.

## TPC & REVIEWER

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- International Journal of Information Technology & Decision Making
- International Journal of Network Management
- IEEE Transactions on Network and Service Management
- IEEE Communications Magazine
- Blockchain Research & Applications for Innovative Networks and Services (BRAINS'20, 21, 22)
- IEEE International Conference on Omni-layer Intelligent systems (COINS'20, 21, 22)
- IEEE International Conference on Blockchain and Cryptocurrency (ICBC 2019, 2020, 2021,2022)
- International workshop (Man2block) co-located with IFIP/IEEE NOMS 2018, Taipei, Taiwan

## OPEN SOURCE

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- **Blockly2Hook**  
A platform for developing visually XRPL hooks smart contract using Blockly from Google.  
**Link:**  
<https://github.com/wshbair/blockly2hooks>
- **HSM2Ethereum**  
A prototype of using Hardware security Module(HSM) to manage the life cycle of Ethereum blockchain key  
**Link:**  
<https://github.com/wshbair/HSM2ETH>
- **BlockZoom**  
A reproducible environment for experimenting distributed ledgers technologies and smart contract applications. The tested is built to run on HPC Platform.  
**Link:**  
<https://github.com/wshbair/BlockZoom>
- **Tokenized Mortgage Sukuk**  
This project is intended to tokenize mortgage sukuk via blockchain technology. The main users of the process are solo investor, notary and SPV. The SPV setup as the originator of the mortgage, it buys and sells the CRE with the funding from the Sole Investor.  
**Link:**  
<https://github.com/wshbair/sukukx>