



Nazri Abdullah

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Swedish Permanent Resident

Malaysia Citizen

WORK EXPERIENCE

May 2022 – Present

Consultant - Lead Software Architect/Engineer, Java and Golang Experienced Backend Developer

Software Architecture Design and Development for Various Projects | Fliptin Inc, Dubai, UAE

- Accountable for crafting software system architectures and overseeing backend development across diverse initiatives. Notable projects encompass blockchain-driven educational digital certificates (certtin.com), cutting-edge accounting software (app.mytaxy.co), and ACE sports management system – all backed by a comprehensive Java backend stack. Employed a range of technologies and frameworks including DDD and C4 Modelling, Java Enterprise, Spring Framework, Spring Boot, Javascript, Golang, AngularJS, ReactJS, and NextJS to ensure seamless delivery.
- Responsible and highly skilled in system deployment design and architecture based on micro-services, adept at setting up deployment tools with Git CI/CD, including experience in managing cloud infrastructure on platforms such as AWS, container orchestration using Kubernetes, and containerization with Docker, ensuring efficient and scalable deployments in cloud-native environments. **Github, Gitlab, Bitbucket, DockerHub**
- Led the successful transformation of the legacy architecture of the Swaziland Mobile-based Utility Payment System, previously dependent on a single-hosting application with Tomcat. Orchestrated the migration to a highly scalable infrastructure utilizing Kubernetes, integrating a robust messaging queue powered by RabbitMQ. This strategic evolution culminated in enhanced scalability, heightened reliability, and optimal resource utilization, ensuring uninterrupted mobile utility payment services. (<https://www.mtn.co.sz/momo/momo-pay>) **Kubernetes, Docker Swarm, Rancher, RabbitMQ, PostgreSQL, Spring boot**
- Setting up and configuring system monitoring tools such as Prometheus, Grafana, and Alert Manager, effectively implementing proactive monitoring and alerting mechanisms to ensure early detection of potential system failures, enabling swift recovery and minimizing downtime for optimized system performance and reliability.
- Referee: Manager - Lee Chana (lee@fliptin.com)

April 2019 – Jun 2023

Software Engineer, Java and Golang Backend Developer

Reverse Engineering & Open Banking Integration | Tink AB, Stockholm, Sweden

- Reverse engineered mobile applications from commercial banks to develop integration agents for financial data aggregation, leveraging a **full Java backend stack** comprising Java Enterprise, Spring Framework, Spring Boot, Python, JavaScript, and Golang.
- Developed financial data aggregation services utilizing European PSD2 Open Banking APIs.
- Played an instrumental role in the development and deployment of eIDAS proxy service, encrypted secret service, and vault system, utilizing the robust **Java Security Stack**.
- Implemented security and aggregation services within a Kubernetes environment.
- Streamlined software development and improved build efficiency by utilizing the Bazel/Maven/Gradle build system.
- Demonstrated proficiency in creating and executing Java mockup tests to ensure high software quality and functionality.
- Automated software delivery processes and ensured code quality by implementing continuous integration and continuous deployment (CI/CD) pipelines using GitLab and GitHub.
- Reference: Marco Vespignani (marco.vespignani@tink.com) - Manager.

July 2017 – Jan 2019

Consultant, Entrepreneur & Full Stack Java Developer

Conventional & Cryptocurrency Payment System | *BIX System Corporation, Washington, USA*

- Responsible for system and component-level design at a very early stage of development **Microservices architecture planning, database design, structuring restful API**. Technology stacks used in this backend: Java Enterprise, Dropwizard Framework, Hibernate, MySQL
- Responsible for Web UI/UX design, development and integration to backend API. Two cycles of front-end development, first one is based on JSF framework and the second cycle is re-develop into AngularJS stack.
- Performed and completed the payment modules for multi-channel (Bank Transfer via SAGE network, Card Payment via RapidConnect network, Bitcoin via Bitcoin network/wallet)
- Research and applied **Hibernate Encryption Interceptor** techniques to secure sensitive data in the database system. The encryption is based on AES256 encryption protocol
- Referee : Prof. Sead Muftic (sead.muftic@bixsystem.com)

Cloud Encryption Services | *Early stage startup, Stockholm, Sweden*

- Alumni of KTH Innovation Pre-Incubator (Batch 4), working on Encryption Services for Cloud Email (Gmail, Microsoft, and etc.) and File Storage (Dropbox, OneDrive, GoogleDrive).
- Responsible to design and develop security and encryption modules.
- Present the project pitch deck in various events and the prospects (Customer, Investor)
- Referee : Mr. Håkan Borg (hakborg@kth.se)

Payroll System embedded with Bitcoin Wallet | *Freelance work, Tallinn, Estonia*

- Responsible to design and develop full stack Payroll system for Small-Medium Business. The system is proposed to be integrated with Bitcoin Wallet for salary payment purpose with crypto currency.
- Performed system and validation test with end user to ensure the correctness of the payroll processing and reporting.

March 2018 – August 2018

ICO Project Technical Advisor

Initial Coin Offering Project Team | *Ultroneum OU, Tallinn, Estonia*

- Performed as a technical advisor to plan, execute and organise the ICO campaign pre-launch setup.
- Involved in preparing, review and evaluate the technical aspect of the project. Finalizing the White Paper prior to public release.
- The setup works also in the preparation of ECR20 Smart Contract, ICO Campaign Site and ICO Platform.
- The purpose of the ICO is to raise a fund to start a project on development of hybrid financial ecosystem where it merges the two major current currencies now days which are conventional and cryptocurrency.
- Referee : Mr. Aziz Abd Rahman (aziz590921@gmail.com)

April 2013 – March 2017

PhD Candidate

Computer Security | *KTH Royal Institute of Technology, Kista, Sweden*

- Performed Research & Development on Computer/Cloud Security Knowledge Area The completed projects are (1) Trusted IDMS for Cloud Environment, (2) Smartcard-based Authentication & Authorization for Cloud platform, (3) Security Platform for Cloud Environment (Re-work the previous version to comply with 64 bit architecture)
- **Current on-going work for PhD thesis** Using Blockchain Technology to Enhance Security in Distributed Big Data Management System. Tehcnology stack applied in this research are Blockchain tools - Hyperledger Fabric & Indy, Big Data platform - Apache Hadoop, and Kerberos protocol.
- Successful published several research proceedings and journals based on completed research works.
- One patent successfully filed titled "Blockchain Identity Management System Based On Public Identities Ledger". Patent No: US 9,635,000 B1
- Referee : Prof. Sead Muftic (sead.muftic@bixsystem.com)

November 2010 – March 2013

Senior Lecturer

Computer Security | **Universiti Tun Hussein Onn, Johor, Malaysia**

- Head of Informaton Security Department to plan, establish and execute a new bachelor program specialised in Information Security.
- Conduct teaching and supervision for undergraduate students in the area of Computer/Network Security.
- Coordinatate final year student final year projects. Technology stack involved in the projects are (1). Convirture Cloud Enterprise (2). Eucalyptus (3). Openstack (4). Cloudstack

July 2007 – September 2010

Senior Researcher

Information Security | **MIMOS Berhad, Kuala Lumpur, Malaysia**

- Responsible to install and manage Linux-based Server for user directory system.
- Grid Computing platform setup: Installation of Globus Toolkit 4.05 for R&D project titled **Grid Security Infrastructure with MyKad (Malaysian Identity Card)**. The installation of Globus Toolkit requires compilation of source code.
- Responsible to Lead for Integrate and Testing Team in Trusted Platform Module (TPM) Research and Development.
- Compile and test the Virtual TPM which developed by a research lab in Germany.
- Responsible to develop KVM-based virtualization to integrate with Virtual TPM to improve the previous setup using Virtualbox on top of Turaya Linux.
- Holding additional position as Software Configuration Manager. To manage and administrate the implementation of CMMI process in Software Development in department. Responsible to administrate the IBM Rational Software Architect, IBM Rational ClearCase, IBM ClearQuest server and clients for project repository purposes.
- Successfully published two (2) patents. 1. Method and Architecture of Micro Kernel(Patent No.: WO2012064171A1). 2. Method and system to establish a trusted interface in a network environment(Patent No.: WO2012057605A1)

November 2001 – Jun 2007

Lecturer

Software Ennginering | **Universiti Tenaga Nasional, Putrajaya, Malaysia**

- Responsible to provide teaching and training materials for Software Engineering, Object-Oriented Software Engineering, Object-Oriented Programming course.
- Delivering lectures for above course and lab sessions to apply the software development tools such as **Rational Rose, Sybase PowerDesinger, Eclipse, JBuilder**.
- Responsible to supervise and evaluate students final year project.
- Responsible to deliver short-period training for final year students in using Open Source Software Application (RedHat Linux/Fedora Linux, Apache Server, Tomcat Server, MySQL Database, NetBeans and Unix Shell Scripting).
- Responsible to manage and configure the LAN network in the organization.

EDUCATION

April 2013 – Jun 2017

Phd Candidate/Researcher

School of Information Technology | KTH Royal Institute of Technology

- Research Areas: *Information Security, Blockchain Technology, Cyber Security, Java Development, Data Communication & Network*

July 1999 – May 2001

Master in Computer Science

CGPA: 3.55/4 | Faculty of Computer Science and Computer Engineering | Malaysia University of Technology

- Interest Areas: *Software Engineering, Software Requirements & Specifications, Software Testing & Quality, Programming Technique, Data Communication & Network*
- Master's project titled **MERP System Development Using OpenSource Technology** was selected as the best project among the same batch of students project.

Jun 1995 – May 1999

Bachelor in Computer Engineering

CGPA: 2.44/4 | Faculty of Computer Science and Computer Engineering | Malaysia University of Technology

- Subjects: *Digital Signal Processing, Control System, Operating System, Computer Architecture, Network Signal, Microprocessor, Object-oriented Methodology*

April 1994

Malaysia Certificate Education

1st Grade | MARA Junior Science College, Kelantan, Malaysia | Ministry of Education

- Top ranking student in Basic Mathematics and Additional Mathematics

March 1992

Malaysia Lower Certificate of Education

1st Grade | Sultan Ibrahim Secondary School, Kelantan, Malaysia | Ministry of Education

- Part of the School's Badminton Club

PROJECTS

January 2018 – March 2019

Cloud Payroll Services with Bitcoin Wallet

A Freelance Project | A company, Tallinn

- Involved requirements collection work, design and development.
- The activities for all aspects includes UI/UX, database and rest API.
- Technology stack: Front-end - JSF, Back-end API - Spring Framework + Postgresql + BitcoinJ + Java Library iText for PDF generation.

July 2017 – May 2018

Design and Development of BIX Ledger & Payment System

Secure Blockchain & Payment Infrastructure | BIX System Corporation, Washington

- The implementation is based on years of research in the lab during my PhD work with supervisor Prof. Sead Muftic (Owner of BIX System Corporation). The concept of the ledger system is patented.
- Involved three major components for the core ledger developments. (1). Identity Management System on Public Identities Ledger. (2). PKI based on Public Certificates Ledger. (3). Secure Notary System based on Public Document Ledger.
- For payment system, development from scratch to interface with gateway provider for bank, card payment and Bitcoin. Bank network used is SAGE network (USA based), and Card network provider is RapidConnect and Bitcoin network.
- My development works involved all stacks, front-end and backend including deployment in Linux servers.
- Technology stack : Java Cryptography, Dropwizard Framework, Postgresql, JavaEE, SAGE SDK, RapidConnect SDK, BitcoinJ and Hibernate Encryption Interceptor.

March 2018 – August 2018

ECR20 Token - Initial Coin Offering

ICO Campaign Project | Ultroneum OÜ, Tallinn

- Manage the development and distribution of the **ECR20 Smart Contract** for Ultroneum XUM token. ECR20 is a token standard provided by Ethereum.
- **Designed Ultroneum Mobile Wallet** a mobile application for peer-to-peer cashless payment system. The app is proposed to include the marketplace module and utility payment function. Tools used for designing works are Invisionapp and Supernova Studio
- Technology Stack : Ethereum, Solidity Programming, AngularJs, MySQL, JavaScript.

Cloud Encryption Service for Public Email and Storage

A Minimum Viable Product Development (MVP) Project | KTH Innovation, Stockholm

- Involved extensive Java Cryptography module to manage all encryption functions at the backend of the services.
- The service allows all users for Google, Microsoft and Dropbox to secure their communication via existing email and encrypt files before uploading into the storage such as Google-Drive, Dropbox and OneDrive.
- The encryption protocols used in this project is based on SMIME and AES256 techniques.
- Technology stack: Front-end - ReactJS, Back-end API - Spring Framework + Java Cryptography + OAuth2 + Postgresql.

SKILLS

Software & O.S.

Linux	Intellij Idea	Ethereum	Hyperledger
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10+ years of experience	5+ years of experience	2+ years of experience	2+ of experience

- Earlier Java Development IDE experience - Eclipse & Netbeans
- Basic skills in Ethereum CLI and Ganache Tools

Programming Languages

Java	JavaScript	Solidity	Go
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7+ years of practice	4+ years of practice	2+ years of practice	2+ years of practice

Languages

English	Swedish	Malay
<div><div></div></div>	<div><div></div></div>	<div><div></div></div>
Business fluency	Very beginner	Mother tough

Key Skills

Continuous Learning | Leadership | Adaptability | Networking | Perseverance

ADDITIONAL DETAILS

Hobbies & Interests

- Forex trading technical analysis, Manchester United Club Fan
- Playing tennis, Travelling and Adventure, Ping pong, Badminton