Principle Architect. An Optimistic Nihilist who loves Science, Rust, Python, FOSS, WebAssembly, WebRTC, and Distributed Systems.

#### **About Me**

I am a passionate and seasoned Software Architect/Engineer with a diverse skill set, boasting extensive experience across various programming languages and technologies. My active contributions to numerous GitHub repositories highlight my commitment to open-source collaboration.

My proficiency spans a wide spectrum, with a strong focus on building (micro)services, predominantly in Rust & Python. My recent interests revolve around the Rust programming language, WebAssembly, and distributed software, reflecting my continuous quest for innovation.

My capabilities encompass the entire software development lifecycle, from architecting and coding to deployment, autoscaling, and maintenance. I have successfully created server-side (.py, .rs), browser-side (.js, .ts, .wasm), and infrastructure (using tools like Terraform, Pulumi, and CDK) solutions. My portfolio includes the development of GraphQL, RPC, and RESTful microservices in Python and Rust, as well as crafting JavaScript frontends with Ember and React. I'm well-versed in DevOps pipelines and have experience in building an End-to-End Test Automation Framework (both horizontal and vertical) using RobotFramework. I've also ventured into the creation of native iOS apps, managed Android and iOS device farms, and even built a Raspberry Pi Bitcoin mining farm with custom ASIC chips.

My expertise covers the entire web application stack, from server-side to browser-side, and extends from architecture to scaling. I have a proven track record of scaling high-traffic web applications and deploying services on major cloud platforms such as AWS, Azure, and Google Cloud. My toolbox includes tools like Fabric, Docker, AWS Copilot, Kubernetes, and more.

Beyond my technical skills, I have a strong leadership background, effectively guiding small tech teams to success and fostering a positive work environment. I've also made significant contributions to open-source projects and indulged in reverse-engineering and 'hacking' mobile applications as a passionate pursuit.

Outside my professional life, I remain committed to exploring new technologies and staying abreast of the latest software engineering trends. I relish engaging in philosophical discussions and delving into topics related to socio-economic and political change. In my leisure time, I enjoy tinkering with IoT and robotic projects alongside my kids, combining fun with continuous learning and skill development.

# Work Experience

### **Principal Architect - Platform**

NuFlights | Nov 2023 - Present | Remote (Part-time)

- Spearheading the improvement and scaling of the platform, building upon the foundation laid during my tenure at Reckonsys.
- Skills: Solution Architecture, Linux, Agile Methodologies, Architecture, Scalability, Rust, Cloud Computing, Docker, SQL, Git, Python.

# Principal Architect - Distributed Systems/Rust

Colligence Research | Nov 2023 - Present | Bengaluru (Part-time)

- Building distributed WebRTC systems in Rust.
- Skills: Rust, Distributed Systems.

#### **CTO**

Nitimis | Oct 2018 - Present | Bengaluru (Hobby)

- Providing superior quality assurance services using RobotFramework.
- Empowering individuals with no prior tech experience to embark on a tech career, particularly in QA Automation.
- Skills: Solution Architecture, Linux, Agile Methodologies, Rust, Docker, Git, Python.

#### **Software Architect**

Appknox | Oct 2022 - Nov 2023 | Bengaluru (Full-time)

- Led the creation of a Rust microservice to generate CycloneDX SBOMs for iOS and Android binaries.
- Skills: Solution Architecture, Linux, Agile Methodologies, Rust, Docker, SQL, Git, Python.

#### **VP of Engineering**

Reckonsys Tech Labs | Jan 2019 - Aug 2022 | Bengaluru (Full-time)

- Standardized engineering processes and implemented key initiatives.
- Created cookiecutter templates for Django projects and React templates.
- Skills: Solution Architecture, Linux, Agile Methodologies, Scalability, Docker, SQL, Git, Python, JavaScript.

#### **Tech Advisor**

Spotlight & Company | Jun 2018 - Jan 2020 | Bengaluru (Part-time)

- Provided technical guidance and scaffolding for early prototypes.
- Skills: Solution Architecture, Linux, Agile Methodologies, Docker, SQL, Git, Python.

#### **Python Consultant**

ZeOmega | Nov 2017 - Dec 2018 | Bengaluru (Freelance)

- Streamlined configuration management for clients using various versions of ZeOmega's product.
- Skills: Linux, Agile Methodologies, SQL, Git, Python, JavaScript.

### Tech Lead, Full-Stack and DevOps Engineer

Appknox | Nov 2014 - Oct 2017 | Bengaluru (Full-time)

- Architected, built, deployed, and oversaw the platform's reliability and scalability.
- Skills: Solution Architecture, Linux, Agile Methodologies, Scalability, Kubernetes, Docker, SQL, Git, Python, JavaScript.

# **Software Engineer**

LaunchYard | Jun 2013 - Apr 2014 | Bengaluru (Full-time)

- Worked on different products such as LMS, Photo Sharing, Food Receipe parser, etc.
- Skills: Linux, Agile Methodologies, SQL, Git, Python, JavaScript.

# **Software Engineer**

Tataatsu Idealabs | Jan 2012 - Feb 2013 | Bengaluru (Full-time)

- Contributed to Collab Layer (PDF Collaboration tool) and developed Rewire, an iOS mindfulness app.
- Skills: Linux, SQL, Objective-C, Git, Python, JavaScript.

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