

## John Shanahan

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### Experience

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RealMobileTech Sept. 2022 - Feb. 2024

Staff Backend Software Engineer

- Mentored a team of 3 Backend Software Engineers, guiding them through the software development lifecycle, agile ceremonies, software design and implementation, and more.
- Designed and executed the transition from a Monolith Architecture to a Service Oriented Architecture utilizing General Purpose AWS EC2 instances, S3 for image storage, and RDS for MySQL.
- Built a proof-of-concept LLM application for Medical Billing by training ChatGPT with our own custom datasets.
- Built a new Docker Compose based local development environment to migrate our developers off of Vagrant.
- Designed and Implemented CI pipelines to run tests and enforce specific metrics such as Test Coverage, Type checking, Lint score, and Sonarqube analysis score.

Kandji Sept. 2021 - Sept. 2022

Senior Backend Software Engineer 2

- Introduced an internal RFC (Accepted) on "*Development Standards & Best Practices*" which outlined the company's stance on items such as type hinting, CI/CD, linting, testing, coverage reporting, and documentation.
- Led the first team of engineers that would start building and deploying new microservices, documenting the approach and how to integrate with the monolith when needed.
- Worked directly with the Principal Architect and all Engineering/QA Managers to move away from our current git workflow to using the well known *Git Flow*.
- Primary day to day work revolved around designing and building proof of concepts for new major feature work in our Django monolith and FastAPI microservices after the transition.

Cisco May 2017 - Sept. 2021

Senior Backend Software Engineer

- Worked on Cisco's Big Data platform; a sandboxed script running platform used for automatic hardware error detection and resolution in Python leveraging Docker and Kubernetes.
- Designed and implemented a Lexer and Parser for our in-house DSL that is used for writing error detection scripts by Cisco TAC.
- Collaborated with a remote team on our Belgium campus to build a config/log file parsing library for indexing and retrieving relevant information quickly and staying within sandbox memory boundaries.
- Designed and built numerous standardized microservice application templates that expedited the time-to-market for new applications by months.

STRAX Intelligence Group May 2016 - May 2017

Backend Software Engineer

- Built internal tooling in Python to streamline the Docker image lifecycle from dev/test to release.
- Wrote our API test suite and reporting in JavaScript using Cucumber and Chai-Http.
- Created a CI/CD pipeline utilizing Jenkins and our custom in-house tooling.

- Automated AWS EC2/Route53/S3 environment creation using Ansible, reducing new customer application deployment time from 6 hours to 10 minutes.

RealMobileTech

Sept. 2014 - May 2016

Junior Backend Software Engineer

- Used CakePHP and MySQL to build a smartphone based payment/rewards platform.
- Used Java to build our internal admin and our public facing Android applications.
- Worked on the API interface to our payment processor for accepting ACH/CC payments.
- Wrote custom tools in Python for the Ops team to measure and manage our messaging queue.
- Built a new notifications microservice in Python for customer outreach utilizing Twilio for SMS and Phone calls, and SendGrid for email.

## Technical Skills

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Programming Languages: Python, PHP, Golang, Java, JavaScript

Databases: MySQL, PostgreSQL, Redis, MongoDB

Tools and Frameworks: Linux, Bash, Git, Docker, Kubernetes, AWS

## Open Source

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### LavaDash

<https://github.com/shanahanjrs/lavadash>

An Event Driven Software-as-a-Service social media/news outlet analyzer that tracks brand name and keyword sentiment in real time to provide alerting and trend insight.

Tech stack is Python+FastAPI, Redis for PubSub, PostgreSQL, and InfluxDB.

### Xmltojson

<https://github.com/shanahanjrs/xmltojson>

A command line tool and Python library for converting XML data into JSON with over 1 million downloads.

### Dro

<https://github.com/shanahanjrs/dro>

A tiny universal frontend for the most popular Linux/Unix Package Managers written in Golang.

## Mentorship

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From 2016 to 2018, I provided mentorship to a Computer Science student in Nairobi, Kenya, supporting and guiding his growth and development in the field. As a result of my mentorship he has achieved success as a software engineer at Microsoft, which showcases the impact of our collaboration on his career development.