Thomas Daniel Galligan

Software Engineer experienced in full stack software development and containerization. Writing code used by government bodies and large multinationals.

Experience

Software Engineer

Jun. 2023 — present

IBM

Java, Groovy, Python3, Kubernetes

- Implemented metrics and observability for a new microservice which acted as a broker between SOAR and WatsonX for SREs to monitor the microservice when deployed.
- Architected a new API endpoint which would create a notification in a separate product within the security portfolio.
- Spearheaded containerizing the new microservice, including CI/CD Jenkins pipelines to buil, run unit tests, integration tests, and deploy the docker image to JFrog Artifactory.
- Led in resolving critical SQL deadlocks, boosting product reliability.
- Authored Ansible playbooks to deploy K8s cluseters, streamlining build infrastructure processes.

Software Engineer Intern

Mar. 2022 — Sep. 2022 Java, ReactJS

- Resolved UI inconsistencies in React codebase to enhance user experience.
- Led the creation of a new build infrastructure environment, reducing downtime and ensuring data integrity.
- Implemented secrets management using HashiCorp Vault to secure sensitive data.

CoderDojo Leader

Sep. 2023 — present

CoderDojo Foundation

- Responsible for running the CoderDojo in the IBM office in Cork
- Teaching HTML, CSS, JavaScript to kids, and more complex web technologies such as React to older students.

Chairperson & SysAdmin

Nov. 2019 — Jun. 2023

UCC Networking Society

- Spearheaded society operations, increasing membership and organizing key technical events.
- Drove a campaign to increase membership by way of giving students the resources to build up a CV and portfolio with the aim of getting a third year work placement.
- Organized the second instalment of Cork DevCon, a techconference, attended by 200+ people. Speakers included Google, Stripe, IBM employees and UCC professors.
- Maintained and managed a datacenter of servers with Proxmox hypervisor with dozens of docker containers provisioned via Ansible.

Technical Skills

Languages: Golang, Java, JavaScript / TypeScript, Python, SQL

(PostgreSQL/MySQL), HTML/CSS, Bash

Technologies: Docker, React, Flask, NextJS, VueJS, Express,

FastAPI

Developer Tools: Git, GitHub, Ansible, Linux, Latex

Projects

Timber — Collaboration Platform

github.com/timber-team/timber

Go, TS, Redis

- Timber is a social networking platform that connects professionals and hobbyists for collaborative projects, focusing on students and newcomers to the industry.
- Worked on a team to create a cutting-edge platform to streamline project collaboration across disciplines, utilizing Docker and Go for backend services and React for a responsive front-end experience.
- Implemented rigid authentication and authorization using a read-through cache backed by Redis.

Tny.ie — **Fast URL Shortener**

github.com/tnyie

Go, Postgres, VueJS

- Built a from-the-ground-up URL shortener using Golang as a backend, with a VueJS frontend for management, and usage tracking, using the Vuetify component library, conforming to the Material Design system.
- Created a Chromium and Firefox browser extension to allow more ease-of-use when creating shortened links, allowing one-click link generation.

Education

BSc. Computer Science

2019-2023

University College Cork

- Teaching assistant / Lab demonstrator for 1st & 2nd Year modules
- Final year project focused on high performance HTTP/3 benchmarking for video streaming.
- Awarded Best Individual Award for work done during my course, and contributions to the Netsoc college Society.