

Thomas Daniel Galligan

galligan.dev | thomas@galligan.dev | linkedin.com/in/gall | github.com/gall

Irish Software Engineer experienced in full stack software development. Writing code used by governments and large multinationals.

PROFESSIONAL EXPERIENCE

Software Engineer

Jun. 2023 — present

IBM

- Contributed to and maintained a robust RESTful API, enhancing system functionality and adhering to industry best practices and security guidelines.
- Contributed significantly to a side project integrated into the product, highlighted by CEO Arvind Krishna's demonstration at Think 2024.
- Led the resolution of critical SQL deadlock bugs, boosting system reliability.
- Optimized database transactions for multi-tenancy environments, improving system stability.
- Authored Ansible playbooks for Kubernetes clusters, streamlining development and QA processes.
- Migrated product unit tests from JUnit4 to JUnit5, ensuring best practices in the testing environment and adding new functionality to existing tests.

Software Engineer Intern

Mar. 2022 — Sep. 2022

IBM

- 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.
- Transitioned build infrastructure to a cost-effective, open-source solution, improving team productivity.
- Implemented secrets management using HashiCorp Vault to secure sensitive data.

QA Engineer Intern

Mar. 2017 — April. 2017

DELL Technologies

- Automated Angular frontend testing with Python3 and Selenium, streamlining product functionality.
- Contributed in planning meetings with the team, helped writing story tickets and documented reproduction steps for bugs.
- Used selenium web browser in headless mode to automate live integration tests between authentication service and the underlying services.

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, L^AT_EX

PROJECTS

Timber — Full Stack Social Media

github.com/timber-team/timber

Go, TypeScript, Redis

- 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, Streamlined URL Shortener

github.com/tnyie

Go, Postgres

- 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.

Research Proposal Review System

github.com/timber-team/timber

TypeScript, ExpressJS

- As a team, worked on an end-to-end product to help the Social Research Ethics Committee for UCC track, and approve/disapprove research studies for researchers as part of the university.

VOLUNTEERING

CoderDojo Leader

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.

Society Chairperson & SysAdmin

UCC Networking, Gaming, and Technology 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 tech-conference, 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.

EDUCATION

BSc. Computer Science

University College Cork

Second Class Honors

- TA / Demonstrator for an undergraduate class.
- 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.