

NOAH SANTSCHI-COONEY

SKILLS

Experience in a range of languages including Go, Kotlin/Java, Python, TypeScript, GLSL, Rust and Bash. Strong interest and/or experience in SRE/systems administration, containerization (Docker/LXD/Kubernetes), observability and monitoring practices, relational/NoSQL/time-series databases, config management (Ansible), CI/CD, web proxies, NiFi, Kafka and Hashicorp tools.

EXPERIENCE

Teamwork, Cork/Ireland – Technical Intern + Part-Time

MARCH 2019 – PRESENT

- Worked on and debugged a distributed ticket filter caching system in Go backed by Elasticsearch and built on the Actor model pattern deployed to Kubernetes, using Apache NiFi as a data ingestion and transformation pipeline.
- Created Helm chart to automate the deployment of Apache NiFi + NiFi flows to Kubernetes.
- Improved the docker-compose based developer environment by automating continuous and isolated updating of Docker images.

CloudCIX, Cork/Ireland – Software Developer

APRIL 2018 – FEBRUARY 2019

- Replaced an ES5 Javascript codebase with a test-suite backed ES6 Typescript.
- Setup a number of internal services such as Sentry for error management, InfluxDB and Grafana for service metrics as well as the Elastic stack and Jaeger for centralized logging and distributed tracing to gain essential application performance insights.

UCC Netsoc, Cork/Ireland – Head Systems Administrator

JUNE 2017 – JUNE 2020

- Led a team of 5 students in managing, restructuring and maintaining a set of 7 Linux servers and a number of internal and student-facing services, such as web hosting, DNS, MySQL databases and a self-made Containers as a Service system.
- Setup a Docker registry with Harbor and Continuous Integration using Drone, backed by Hashicorp Vault for secrets management.
- Codified the infrastructure and services using Ansible, version controlled on Github.
- Migrated the servers from bare-metal Ubuntu to Proxmox to virtualise the infrastructure to enable remote administration of infrastructure over GUI or Ansible.

EDUCATION

University College Cork, Cork/Ireland – BSc Computer Science

SEPTEMBER 2016 – APRIL 2020

First Class Honours in the Core Computer Science stream.

Final Year Project was on the topic of Distributed Tracing, using the OpenTracing API to develop a debugger integration for Visual Studio Code utilising the Debug Adapter Protocol aimed at polyglot microservice systems and codebases. Code and report available on Github.

PROJECTS

More on my Github or website, links above.

- **Windlass:** Containers as a Service provider for UCC Netsoc using LXD or Firecracker MicroVMs to run Docker containers. Integrated with Hashicorp Consul and Vault for service discovery and TLS cert persistence.
- **VSCoDe MC Shader:** Visual Studio Code extension and language server providing code diagnostics and insights into GLSL shaders for the Minecraft Optifine platform. Written in Rust and Typescript.