

Charles Fyfe

✉ ch@rles.uno

📧 charles.uno

☎ 651-269-9245

📍 Minneapolis

Summary

Ten years automation and analysis in Python. Fluent in Linux and shell scripting. Recent emphasis on CI/CD/CT infrastructure with Jenkins, Docker, and REST APIs. Comfortable mentoring interns, onboarding employees, and creating educational materials for new technologies.

Experience

Cray Inc: Intern → Test Engineer → DevOps Engineer 2014–Present

- Wrote a **Groovy** pipeline to build, test, and distribute RPMs in support of 100+ engineers.
- Illustrated pipeline usage with an annotated end-to-end example: a **REST API** written in **Go**, wrapped in a **Docker** container, and deployed to **Kubernetes** via **Ansible**.
- Rolled out a **Continuous Testing** solution for the Shasta product line. Secured VP buy-in, communicated requirements to dozens of product groups, and followed up on concerns.
- Designed a framework to execute nightly tests on live mainframes. Ingested results into an **ELK** database. Interfaced with **Slack** and **Jira** APIs to notify product owners of failures.
- Crawled the **Jenkins REST API** to monitor deployments of 6 product streams across 27 mainframes. Aggregated metrics onto a **CGI** dashboard viewed 100+ times daily.
- Implemented a **Python** API for access and analysis of mainframe system logs. Parsed terabytes of text to diagnose hardware failures on a \$70 million customer installation.
- Mentored two interns, both of whom were awarded extensions. Prepared and presented educational materials to onboard dozens of new employees.

University of Minnesota: Teaching Assistant → Research Assistant 2009–2016

- Benchmarked and optimized a wave simulation in parallel **Fortran**. Implemented a **Python** harness to configure, compile, and launch hundreds of simulations in parallel.
- Analyzed hundreds of gigabytes of data with **Numpy** to isolate novel patterns.
- Led laboratory exercises and tutored at-risk students individually. Coordinated between professors, graduate teaching assistants, and undergraduate tutors as Head TA.

Education

University of Minnesota: PhD 2009–2016

- Space physics, Burlaga/Arctowski Medal Fellow

St Olaf College: BA 2005–2009

- Math (Distinction), Physics (Distinction), Magna Cum Laude