EDUCATION

ROCHESTER INSTITUTE OF TECHNOLOGY

MS IN COMPUTER SCIENCE May 2017 | Rochester, NY

Domain: Parallel and Distributed Systems

BS IN COMPUTER SCIENCE May 2016 | Rochester, NY

Minor: Communication

SKILLS

PROGRAMMING

Extremely comfortable:

C++

Comfortable:

Go • Python

Familiar:

Java • C# • Javascript

AGILE

JIRA • Confluence

ARCHITECTURE

AWS Cloudformation • MIRO • UML Diagraming: Sequence, Class • ETEX • Doxygen

TECHNOLOGIES

Lambda, SQS, SNS • Boost C++ • CMake

- Curl Docker Git Jenkins Mapbox
- OpenCV React Rollbar RPM Vim

LINKS

Github:// afowles LinkedIn:// adamfowles

EXPERIENCE

EAGLEVIEW | SENIOR SPECIALIST ENGINEER

Jan. 2019 - Present | Rochester, NY

Aerial imagery, data analytics, property data, and GIS solutions.

- Integrating an image factory on track to produce over 200 million images in 2020 with a warehouse for storing imagery using Go microservices built on top of AWS including DynamoDB, ECS, Lambda, SQS, and SNS.
- Governing an image factory codebase of 100K+ lines of modern C++ (17/20, GCC 10+) including application and library code built on the latest Fedora operating systems. Managing complex code dependencies and build systems utilizing Docker, Artifactory, and Jenkins.
- Architecting services across verticals in a global engineering organization. Collaborating with teams in Bengaluru, Perth, and Bellevue.

Apr. 2019 - Jan. 2020 | Specialist Engineer

- Designed and developed scalable applications for extracting and developing raw imagery from an aerial capture system. Built on top of AWS using EC2.
- Utilized Jenkins for continuous integration with Docker for building and deploying applications and libraries. Wrote unit tests using google test with lcov/gcov code coverage tools.

Apr. 2019 - Apr. 2019 | Software Engineer II

- Supported an image processing R&D team on scaling and building cloud-based solutions for new aerial image pipelines.
- Implemented a library for writing a custom image format that efficiently displayed tiled imagery at multiple resolution levels.

Aug. 2016 - Apr. 2018 | Software Engineer

- Maintained a legacy capture platform for producing aerially triangulated imagery while building next generation software solutions.
- Ported algorithms for developing and demosaicing imagery from MFC C++ desktop applications to cross-platform modern C++ libraries.

Artifactory • AWS: DynamoDB, ECS, EC2, LOCKHEED MARTIN | Software Engineering Intern

Jun. 2015 - Aug. 2015 | MST - Syracuse, NY

• Worked on tracker software for the TPQ53 radar system, implemented features to allow for better range accuracy when tracking projectiles.

Jun. 2014 - Aug. 2014 | MST - Syracuse, NY

• Worked with the Non-Propulsion Electronics team on a ship control system for Seawolf-class submarines.

Held a United States government security clearance at the Secret level.

GE AVIATION | SOFTWARE ENGINEERING CO-OP

Aug. 2014 - Dec. 2014 | Grand Rapids, MI

- Worked with the Navigation and Guidance team on software for the Boeing 737, specifically the Flight Management System (FMS).
- Ran confidence and interoperability testing on new releases of the 737 FMS in a lab setting.

R.I.T. DEPARTMENT OF COMPUTER SCIENCE

TEACHING ASSISTANT

Jan. 2016 - Aug. 2016 | Rochester, NY

- Taught recitations on material presented during the week for introductory Computer Science courses.
- Held 12 hours of tutoring during the week on all topics covering the first three semesters of the undergraduate degree.