Calvin Gagliano

calgagi@gmail.com
calgagi.github.io
(503) 915-5559
linkedin.com/in/calgagi
github.com/calgagi
C++, C#, Python

Experience

Amazon Web Services, Inc. - Software Development Engineer II (Directory Service) *April 2024 - Present, Seattle, WA*

- Designed an agent in .NET 8 that runs on customer-owned Microsoft Active Directory (MAD) instances that monitors and reports unhealthy activity to an AWS-owned API Gateway backed by AWS Lambda functions
- Developed testing framework in C# for other team members to write and run tests on managed directory service instances
- Wrote Python script to modify the retention policies of millions of production directory instances' log groups
- Modified scaling in and scaling out of server instances to work for new version of the managed directory service product

Microsoft Corporation - Software Engineer II (Visual Studio Debugger) *July 2020 - April 2024, Redmond, WA*

- Developed the full end-to-end experience for Dependent Breakpoints for Visual Studio 2022 which is used ∼100k times monthly and received great responses and a CSAT score of 85
- Designed and built Breakpoint Groups which required prioritizing and managing tasks, bugs, and testing for two other software engineers and resulted in delivering by expected date
- Created Temporary Breakpoints which involved refactoring the debugger's glyph APIs and designing a better algorithm for persisting breakpoints using C# and C++
- Proposed and completed implementation of telemetry and dashboards for dependent breakpoint groups, nested breakpoint groups, and certain advanced breakpoint types
- Wrote new API for gathering data from an exception's callstack for use with the debugger's AI (Copilot) exception helper
- Implemented data breakpoint support for the VS Code C++ extension for GDB scenarios [link to PR]
- Responsible for managing the VS Diagnostics (∼50 people) main branch which involves forward/reverse integrations weekly, investigation and triage of issues
- Represented the debugger teams as the D&I Champ to organize events and advocate for more inclusion within VS Diagnostics
- Created a method for determining if memory is owned purely by a debugger-generated TypeProxy managed object or by the debuggee process which saved the debugger from displaying an incorrect error message 100+ times per month

Oregon State University - Teaching Assistant (Undergrad CS) *September 2018 - March 2020, Corvallis, OR*

- Taught universal coding concepts, basic data structures, and object-oriented programming using C and C++ in Oregon State University's year-long introductory CS 16X course series
- Led and delivered weekly live-coding demos on topics such as pointers and recursion to lab sessions enrolling 20+ students

Microsoft Corporation - Software Engineer Intern (Azure CodeSign) *June 2019 - September 2019, Redmond, WA*

- Developed a Docker image to componentize sign tools and custom key storage provider to enable portability
- Used Powershell, C#, and .NET to create, schedule, and deploy sign jobs between container instances, which delivered proof of concept for Azure signing service that currently signs ∼3 billion files monthly

Kaiser Permanente - Software Engineer Intern (Claims Processing) *June 2018 - September 2018, Portland, OR*

- Created REST API routes using Node.js and Express.js to deliver results from thousands of tests every day
- Developed major full stack features with Angular.js such as bookmarking test cases and a 1-click-run button

Projects

cp_gen (C++, Makefile) *github.com/calgagi/cp_gen*

- Command line interface-based template generator for creating competitive programming templates on the fly, with an emphasis on ability to add, test, and use new libraries easily
- Implemented automated building and testing using Makefile, YAML, and GitHub Actions

Education

Oregon State University - Computer Science, B.S. (3.92/4.00 GPA) *September 2016 - June 2020, Corvallis, OR*

- Revived the Association for Computing Machinery chapter as President and handled weekly meetings, company hiring/information events, and competitive programming practicing which rose membership from 4 people to 100+ in 1 year
- Majored with a Systems focus and minored in Mathematics, volunteered with the EECS Graduation Celebration Board
- Achieved 1st place in Oregon at ICPC Pacific Northwest 2019