ALEXANDER VALLEJO

EMPLOYMENT

Senior Software Engineer

Microsoft Corporation

Jan 2018 - Present

Azure Compute – Fabric Controller

- · Building Azure's next generation container manager
 - Responsible for multiple workstreams of critical functionality
 - Designed and implemented a method for exposing transactionally consistent container data sourced from multiple microservices
 - Designed and implemented core container repair capabilities
 - Built backwards compatibility for container health monitoring services
- 99% reduction in single points of failure for control plane clusters via building a fault domain analysis service
- Built a capacity analysis service to proactively identify and mitigate control plane machine shortages
- · Built a lightweight distributed tracing framework and integrated it across micro-services

Software Engineer

Microsoft Corporation

October 2015 - Dec. 2017

OneDrive – Sync Client (Mac and Windows)

- Built a feature to help users move local content to OneDrive
- Built automatic screenshot upload for the Mac sync client
- Built a context menu for the Mac Finder that provides quick access to OneDrive features (share a link, view online, manage storage, choose folders to sync, etc...)
- Built a share dialog that allows users to control sharing options for their files without leaving Finder or Windows
 Explorer

Software Engineer, Intern

Microsoft Corporation

Summer 2014

Implemented notifications for users of OneDrive who have expiring/expired bonus storage

EDUCATION

Pittsburgh, PA

University of Pittsburgh

Fall 2011 - Spring 2015

- Bachelor of Science (B.S.) in Computer Engineering. Cum Laude.
- Cumulative GPA: 3.49 out of 4.0

TECHNICAL EXPERIENCE

Personal Projects

- Orgman. Automate the organization of your student organization. Production quality web app with a full test suite using continuous integration (Travis CI). Ruby on Rails. Source: https://github.com/valleyjo/orgman
- MIPS CPU. Full implementation of the MIPS instruction set. Includes five pipelines, L1 cache and interrupts. HDL Designer & VHDL.

Languages and Technologies

- · Proficient: C#
- Previously Proficient: C++, Objective-C
- Prior experience: Java, Ruby, Python, PowerShell, distributed systems, Paxos, gRPC, Bond, .Net core, .net 5, Win API, Cocoa, .Net, Ruby on Rails, git, Windows Internals

LEADERSHIP EXPERIENCE

Intern Mentor 3x

Microsoft Corporation

Multiple Summers

· Provided guidance and technical advice for an intern working on a production project

Engineering Peer Advisor

University of Pittsburgh

Fall 2013

• Taught two sections of an official university course to assist freshmen with their college transition

HONORS AND AWARDS

Eagle Scout: Leadership project established a computer lab at Angels' Place **Distinguished Young Alumni Award:** Our Lady of the Sacred Heart High School

github: valleyjo