

EMPLOYMENT

Software Engineer II **Microsoft Corporation** **Jan 2018 - Present**

Azure Compute – Fabric Controller

- 80x reduction in message latency @ P99 in distributed messaging infrastructure via new protocol implementation
- 70% 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 control plane machine shortages
 - Tens of millions of dollars of CapEx directed via the service
 - Analyze capacity across hardware fault domains and performance characteristics
- 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, .Net core, Win API, Cocoa, .Net, Ruby on Rails, git, Windows Internals

LEADERSHIP EXPERIENCE

Intern Mentor 2x **Microsoft Corporation** **Summers 2017 & 2019**

- 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; Estimated benefit: \$13,500
- **Distinguished Young Alumni Award:** Our Lady of the Sacred Heart High School