Patrick Cody

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EDUCATION:

The George Washington University, Washington, DC

Bachelor of Science in Computer Science, expected graduation May 2020, GPA 3.45

Relevant Courses: Distributed Systems, Operating Systems, Algorithms, Software Engineering

WORK EXPERIENCE:

Undergraduate Research Assistant, Washington DC

Feb 2017-Present

GW Cloudlab

- Work on the OpenNetVM project under Dr. Tim Wood to provide software-defined networking with DPDK
- Presented a demo and co-authored a demo paper at the ACM SOSR conference
- For summer 2017, selected to be a fellow for the SEAS Undergraduate Program in Engineering Research, in addition to being a partial recipient to an NSF grant
- Presented the resulting research at the 2018 SEAS R&D Showcase

Undergraduate Teaching Assistant, Washington DC GW SEAS

August 2018-Present

- Run a lab section for the Intro to Programming in Java class, and teach review material from lecture and answer questions about in-class lab exercises
- Host office hours 4 hours a week to answer questions students have outside of lab and lecture

System Administrator, Washington DC

May 2017 - Present

GW Cloudlab

- Manage a 50-machine Linux cluster and associated hardware, including Arista and Dell switches
- Also maintain a VMWare ESXi virtual machine cluster

Software Engineering Intern, Washington DC

May 2018-August 2018

Mission Data

- Created software demos for R&D projects with experimental hardware, including the Amazon Deeplens and Microsoft Hololens, and documented the projects on the Mission Data <u>blog</u>
- Extended back-end Java Spring server to backup incoming JSON files
- Created React web app to utilize the WMATA web API and display incoming metro train times

TECHNICAL PROJECTS:

OpenNetVM Feb 2017-Present

- Implemented virtual network function in C to track internet packet flows
- Added ARP response capability and a configuration file loading system
- Collaborate with other researchers to implement features and decide project direction

Metro Times Alexa Skill

July 2017

- Used Python and the WMATA web API to create an Alexa Skill that provides train times
- Supports searching for specific stations and receiving system-wide alerts about the metro status

TECHNICAL SKILLS:

Languages (Experienced): Java, C, Python, SQL, HTML, CSS

Languages (Familiar): Javascript, PHP, Bash

Software/Other: Django, ReactJS, Linux command line, Docker, Kubernetes, Git, GDB, LDAP, VMWare ESXi

LEADERSHIP POSITIONS:

GW Association for Computing Machinery (ACM) President

April 2018 – Present

SEASSPAN Mentor

April 2018 - Present