

Lawrence Lee

EXPERIENCE

SOFTWARE ENGINEERING INTERN

SONiC, Azure Networking, Microsoft

Redmond, WA

May 2019 – August 2019

- Modified **Linux system services** to support parallelized **Docker** container stacks
- Worked with **Linux network namespaces** to encapsulate and connect multiple **network processing units**
- Debugged and measured **BGP** session performance
- Increased switch management software throughput by **400%**

SOFTWARE ENGINEERING INTERN

SWAN, Azure Networking, Microsoft

Sunnyvale, CA

May 2018 – August 2018

- Migrated **C++/C#** network services to use **Protobuf** and **gRPC** to reduce CPU usage by 80% and memory usage by 20%
- Implemented a new **proprietary message standard** between networking services
- Streamlined and **containerized** application **build pipeline**

CO-FOUNDER, ANDROID DEVELOPER

Crowdshout

State College, PA

November 2017 – Present

- Designed **model** and **associated mechanics** for location-based social network
- Developed and tested native **Android** application with **MVP** architecture to interact with REST API

SOFTWARE DEVELOPMENT INTERN

Autonomy Group, Sikorsky Aircraft Corporation

Stratford, CT

June 2017 – August 2017

- Designed a benchmarking application to measure performance of **geometric mesh generation** methods
- Developed a module to **visualize** point clouds
- Implemented usability improvements to existing **point cloud data** conversion and analytical tools

SUBSYSTEM LEAD

Payload Subsystem, Lion Tech Rocket Labs

University Park, PA

September 2017 – May 2018

- Developed **C++** control software for an autonomous rover
- Designed and fabricated rover **circuitry** including **Arduino** micro-controller, various sensors, motors, servos, and ejection devices

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EDUCATION

2016 – 2020	Penn State University <i>Schreyer Honors College</i>
DEGREES PURSUED	Computer Science B.S. — M.S.
FALL 2018	3.84 Major GPA 3.63 CUMULATIVE GPA <i>Graduate Student</i>

PERSONAL PROJECTS

STACKOVERFLOW SEARCH

A **Java** utility to automatically search Google and Stack Overflow for exceptions thrown during run-time

GROUPME TRANSLATOR

A GroupMe **Python** bot which corrects certain words sent inside a chat and re-sends a translated message

NEARBY

A social media platform built with **Django** and **Angular** to share crowd-sourced information about local events

TECHNICAL SKILLS

PROFICIENT IN	C++, C, Java, Python, CMake, Make, Linux Administration, Docker, Git
FAMILIAR WITH	C, Bash Scripting, SQL, Apache Maven, Doxygen

MULTIMEDIA SKILLS

PROFICIENT	Adobe Premiere, HTML, CSS
FAMILIAR WITH	LaTeX, Adobe After Effects, Adobe Photoshop

COMMUNICATION SKILLS

ENGLISH	Native speaker
CHINESE	Oral (Mandarin): fair – Written: basic
SPANISH	Oral: basic – Written: basic