Lawrence Lee

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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 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

EDUCATION

2016 – 2020	**Penn State University** *College of Engineering*
DEGREES PURSUED	**Computer Science, B.S.** *Minor in Mathematics*
GPA	**3.87 Major** 3.66 CUMULATIVE

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