Sean Lee seandlee18@gmail.com | (925)-596-5350 | seandlee.com

Education

Purdue University - West Lafayette, IN

Master of Science in Computer Science Bachelor of Science in Computer Science GPA: 3.86/4.00

Relevant Coursework: Distributed Systems, Computer Networks, Operating Systems, Software Engineering, Machine Learning Systems, Data Structures and Algorithms, Object Oriented Programming Experience

Software Engineering Intern

Maxar Technologies

- Worked on command and telemetry management for NASA's Power and Propulsion Element
- Designed and developed a RESTful API using Python to enhance data access for downstream teams
- Increased code coverage by writing unit and integration tests with PyTest
- Handled SQL database and application images utilizing Docker Compose and AWS ECR January 2024 - Present

Computing Assistant

Rosen Center for Advanced Computing

- Built a command line dashboard to automate the process of querying user information using shell scripts and Python
- Contributed to user guides for the Rosen Center's various High Performance Computing clusters
- Troubleshooted user issues and answered questions on topics such as UNIX tools and job schedulers

Teaching Assistant

Purdue University

- Led weekly office hours for the undergraduate operating systems course
- Developed programming assignments in C and x86 assembly that test student understanding of concepts such as process, memory, and device management

Undergraduate Researcher

The Data Mine - Purdue University

- Led a student group collaboration with Sandia National Laboratories to address flight stitching, successfully assembling flight tracks
- Implemented an algorithm in Python to match and merge flight pieces, utilizing feature similarity and machine learning techniques which led to 80% accuracy

Data Science Intern

American First Finance

- Conducted comprehensive analysis of the company's market performance across various metropolitan statistical areas, identifying high-potential growth areas
- Automated data processing tasks using Python scripts, enabling efficient transformation of raw data into interactive charts and graphs

Projects

Paxos Implementation

- Implemented the Paxos consensus algorithm for distributed systems in Java ensuring robust and efficient agreement across nodes
- Tested against a vast suite of search tests to validate the correctness of the implementation

Calypso

- Developed a full stack web app that locates available classrooms for students to study in
- Created a user-friendly and intuitive user interface using React.js
- Built a reliable backend API that parses and formats classroom data using Go

Activities

LaunchPad (President)

- Feb 2022 Present Led and organized a mentoring program, facilitating the pairing of upperclassmen mentors with
- freshman students passionate about computer science and programming Planned and coordinated logistics for events, ensuring the smooth execution of programs involving 100+ participants

August 2022 - Present

January 2024 - May 2024

June 2022 - August 2022

May 2026

May 2025

May 2024 - August 2024