# **Andy Plank**

219-575-1591 | aplank14@gmail.com | linkedin.com/in/andy-plank | github.com/Aplank14 | andyplank.me

## Education

## **MASTER OF SCIENCE IN COMPUTER SCIENCE**

• Purdue University – 2021 to 2022

· GPA: 3.97/4.0

## **BACHELOR OF SCIENCE IN COMPUTER SCIENCE**

• Purdue University – 2017 to 2020

· GPA: 3.96/4.0

· Graduated with Highest Distinction

## **Technical Skills**

## **LANGUAGES**

· JavaScript, TypeScript, Java, Python, Kusto

#### **FRAMEWORKS**

· React, Bootstrap, Tailwind, Electron

#### **PLATFORMS**

· Azure, Linux, AWS, Github Actions, MongoDB, Heroku

#### TOOLS

· Perf, Flame Graph, FIO, ETW

## **Experience**

## MICROSOFT | SOFTWARE ENGINEER II

**AUGUST 2022 - PRESENT** 

- · Researched under-performing areas of Azure server using tools like ETW and flame graphs.
- · Proved the use of a different memory allocator would reduce CPU usage by 57% for local storage workloads.
- · Identified and fixed a bottleneck in local storage workloads that increased throughput by 68%.
- Placed 3<sup>rd</sup> of 34 teams in a company sponsored Hack the Box security event.

## PURDUE UNIVERSTY | HEAD GRADUATE TEACHING ASSISTANT

**JANUARY 2021 - MAY 2022** 

- · Recipient of the 2022 "Graduate Teaching Assistant of the Year" award from the ACM student chapter.
- Lectured 200 students on computer architecture during the professor's absence.
- Taught two lab sections of 24 students every week on course concepts such as ARM assembly and building circuits.
- · Coordinated all graduate teaching assistants on course issues like covid related absences and grading.

## **EPIC SYSTEMS | SOFTWARE ENGINEERING INTERN**

**MAY 2020 - JULY 2020** 

- · Proposed a new method of growth chart graphing to allow physicians to easily identify abnormalities in babies.
- · Conducted a feature usability study including national and international customers.
- · Refactored a graphing module using C# and React to reduce cyclomatic complexity by 88%.

### **PURDUE UNIVERSITY | RESIDENT ASSISTANT**

**AUGUST 2019 - DECEMBER 2020** 

- Promoted an inclusive community on the floor by planning and hosting weekly events for 49 residents.
- Mediated conflicts between roommates to solve issues residents had with one another.
- · Interviewed potential resident assistant candidates for the following school year.

## **QUICKEN LOANS | SOFTWARE ENGINEERING INTERN**

**MAY 2019 - JULY 2019** 

- · Designed a web application with Angular to manage and track the intake of new tech ideas at Quicken Loans.
- Setup application hosting with infrastructure on AWS, including S3s, Lambdas, and API Gateways.

## **Projects**

## **PLAYHONEYPOT.COM**

• Developed an online party game where players answer questions and guess who said what using Typescript, React, Nodejs and WebSocket.

#### LEAGUE OF LEGENDS MUSIC PLAYER

• Built a desktop app with Electron to play Spotify music based on current League of Legends game statistics.

## Volunteer Work

## MENTORS FOR ASPIRING GIRLS IN COMPUTING | MENTOR

**AUGUST 2018 - MAY 2020** 

- · Volunteered 20 hours a semester at local middle schools to increase interest in computing among young women.
- · Taught computing concepts using breadboards, Minecraft, web design, and Lego Mindstorm.