# **Devin Arena**

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#### **WORK EXPERIENCE**

Mastercard February 2024-

Software Engineer II - Java

O'Fallon, Missouri

- Enhanced global financial applications by refining microservice-based architecture for scalability and performance
- Delivered critical production support for high-volume transaction systems operating across international markets
- Designed and implemented Splunk dashboards to verify integrity across hundreds of millions of financial transactions

May 2023-February 2024

Software Engineer I - Java

O'Fallon, Missouri

- Engineered microservice-driven financial applications capable of processing thousands of transactions per second
- Optimized automated regression testing using JUnit, significantly reducing test execution time across services
- Developed DDL/DML scripts for Oracle databases, created verification scripts to ensure data accuracy post-deployment

SRC, Inc. 2022

Software Engineer Intern

Syracuse, New York

- Upgraded the root filesystem on microcontrollers and updated scripts from Python 2 to Python 3
- Created a makefile scraper to compile dependency and version information for Buildroot configurations
- Tested and documented the new Linux root filesystem and software package on microcontrollers

## Florida Gulf Coast University

2020-2023

Research Assistant - Physics

Fort Myers, Florida

- Automated running MadGraph and MadAnalysis simulation software on Ubuntu using Python
- Analyzed outputs, compared results to public databases, and presented 3 posters on collision detection of dark matter

#### **TECHNOLOGIES AND LANGUAGES**

• Git, SQL, NoSQL, NodeJS, REST, Spring, Linux, Java, Javascript/TypeScript, Python, C++, C, Rust, HTML, CSS, React

#### **EDUCATION**

## Florida Gulf Coast University

Fort Myers, Florida

Bachelor of Science in Software Engineering

GPA: 4.0

### **PROJECTS**

#### Positron | C, Make

December 2022–Present

Developed a scanner, parser, compiler, and virtual machine for a dynamically typed interpreted language in C

### **YDKBot** | Javascript, Node.js, Discord.js

May 2023

- Created a Discord bot to guery the YGOProDeck API and display card information in a formatted embed
- Implemented local caching to reduce repeated calls to the remote API and decrease response time

## TGraph | C++, Make

August 2022-September 2022

- Built a terminal-based equation graphing application in C++
- Implemented a Pratt parser for parsing complex equations

## <u>RouxSolver</u> | Node.js, Javascript, HTML, CSS, Three.js

**October 2021/June 2022** 

- Created a speedcubing AI to track cube state, utilize algorithms, and compute near-optimal solutions
- Utilized Three.js to build an interactive speed cube in 3D space

### Minesweeper AI | Javascript, HTML, CSS

December 2019/September 2021

• Built an AI that utilizes a probability map for solving Minesweeper puzzles in vanilla JavaScript