Kandasamy Chokkalingam

(301) 529-9158 | kchoks@umd.edu | www.linkedin.com/in/kandasamyc | Clarksburg MD

Education

University of Maryland *4.0 GPA* *Expected Graduation May 2024*

Bachelor's of Science in Computer Science and Applied Mathematics, Honors College

Relevant Courses: *Object Oriented Programming II, Discrete Structures, Introduction to Computer Systems*

Skills

Programming: Proficient in Python, Java, C, Bash and JavaScript. Experience in Haskell, C++, SQL, Ruby

Technologies: Angular, ReactJS, Pendo, PyTorch, Pandas, Numpy, Flask, ADO, Git, ROS, and Linux

Experience

Software Engineering Intern @ Thomson Reuters *Minneapolis, MN* *May 2022 — Present*

- Debugging a 25+ years old Java codebase to solve a CIAM login security issue
- Researching and independently producing solutions to assigned tasks in large Git/TFVC repositories
- Implementing custom JS protocol to migrate analytics' data for 20,000+ users on the fly

Research Internship @ University of Maryland *College Park, MD* *June 2020 — August 2020*

- Researched the use of reinforcement learning with Ramsey Games under Dr. William Gasarch
- Implemented reinforcement learning algorithms in Python with PyTorch
- Worked with a team to study the use of reinforcement learning in other game variants

Personal Projects

Scouting Data Ingest *Poolesville, MD* *November 2020 — January 2022*

- Designed and engineered a solution to ingest, correlate and analyze robotics data from multiple sources
- Constructed a Python backend with Pandas and Numpy and a web app interface using Flask and Vue.js
- Developed a REST API to interface a web app with a MySQL database hosted with AWS
- Deployed backend to an AWS Ubuntu machine using NGINX as a reverse proxy

HopHacks Hackathon *College Park, MD* *September 2021*

- Collaborated with two team members to create an energy usage and impact comparison tool in 36 hours
- Created and developed a ReactJS web app with Bootstrap survey form
- Helped to test and develop a data-processing backend with Flask query API

Leadership

Bitcamp *College Park, MD* *October 2021 — Present*

- Leading 10+ member logistics team for one of the largest hackathons on the East Coast

Robotics @ Maryland *College Park, MD* *October 2021 — March 2022*

- Refined image processing pipeline to automatically label and classify images using OpenCV
- Used Python and Gazebo to automatically collect simulated test images for classification

National Cyber Scholarship Competition *Poolesville, MD* *January 2021 — May 2021*

- Solved various cybersecurity, web, binary, and cryptography problems using Python and and JS
- Used various UNIX/Linux tools in order to investigate and solve problems

FIRST Robotics Club *Poolesville, MD* *September 2017 — June 2021*

- Led 50+ person team for 3 years in various roles ranging from lead to captain
- Created software to control a holonomic drive base and other external subsystems on a robot

Awards

President's Scholar from the University of Maryland *2021 — Present*

National Cyber Scholar from the National Cyber Scholarship Foundation *2021*

National Merit Scholar from the National Merit Scholarship Program *2021*