# Kandasamy Chokkalingam

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### Education

#### University of Maryland 4.0 GPA

Expected Graduation May 2024

B.S. in Computer Science, B.S. in Applied Mathematics, Honors College, President's Scholar Relevant Courses: Introduction to Computer Systems, Algorithms, Advanced Data Structures, Introduction to Compilers

#### Skills

**Programming:** Proficient in Python, Java, Bash and JavaScript. Experience in C, Haskell, Ocaml, SQL, Ruby **Technologies:** Ansible, Jenkins, Docker, Grafana, k6, ReactJS, Pendo, PyTorch, Numpy, Flask, Git, and Linux

## Experience

## Research Assistant @ University of Maryland College Park, MD

August 2023 — Present

- Developing modular decision assistance software with commercial and research applications
- Researching scalable, effective decision-making using LLMs for facilitation and design thinking strategies
- Expanding functionality through the addition of various front-end React meeting components

### Software Developer Intern @ Verisign Reston, VA

May 2023 — August 2023

- Implemented flexible and adaptable performance tests in JS with Grafana k6
- Engineered continuous monitoring through a Jenkins CI/CID pipeline with Ansible and Docker
- Created dynamic visualizations in Grafana through exporting data into InfluxDB

### **Software Engineering Intern @ Thomson Reuters** Minneapolis, MN

May 2022 – May 2023

- Debugged a 25+ years old Java codebase to solve a CIAM login security issue
- Developed custom JS functionality to migrate analytics' data for 20,000+ users in real time
- Led large-scale API migration for critical feature and produced Java, and JSP code to support it

### 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 models like Q-Learning and Graph Neural Networks with PyTorch
- Collaborated with a team to study the use of reinforcement learning in other game variants

## Personal Projects

### Homelab College Park, MD

August 2022 - Present

- Self-hosted an Ubuntu server with systemctl services and docker containers behind NGINX
- Configured custom P2P VPN and DNS setup using pihole and Tailscale for privacy and security

#### Scouting Data Ingest Poolesville, MD

November 2020 — January 2022

- Designed and engineered a solution to ingest and analyze robotics data from multiple sources
- Constructed a Python backend API with Pandas/Numpy and a web interface using Vue.js
- Deployed to an AWS Ubuntu machine using NGINX as a reverse proxy with MySQL on RDS

## **Experience & Leadership**

### **Planetterp** College Park, MD

March 2023 — Present

- Developer on 3-person team for professor and course review website used by 30,000+ people
- Debugged and produced solutions to various issues in a large Django application

#### Bitcamp College Park, MD

October 2021 — Present

- Leading 80 person team to organize one of the largest hackathons on the East Coast, lasting 36 hours
- Led 12 person subteam in charge of food, travel, utilities, and personnel for 1,000+ attendees
- Coordinated goals, tasks and logistics with various vendors and stakeholders to manage over \$150,000

## Robotics @ Maryland College Park, MD

October 2021 — March 2022

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