Agam Kohli

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Ann Arbor, MI

EDUCATION

University of Michigan

Bachelor's of Science in Engineering

August 2020 – April 2023

- Major: Computer Science
- 3.8/4.0 GPA
- M-STEM Student Council Board
- Michigan Data Science Team member

EXPERIENCE

Cybersecurity Intelligence Intern

Ford Motor Company

May 2022 – July 2022 Dearborn, MI

- Automated **ThreatConnect** tag and attribute source rename, merge, and deletion through **Rest API** calls and **MySQL** commands, helping Intelligence analysts better undertand how indicators relate to each other.
- Validated 174 **Indicators of Compromise** to judge maliciousness of IPs, addresses, domains, URLs, and file hashes reported by the Detection team.
- Undertook the **Intern City of Tomorrow** project to design a way to improve mobility in urban environments using autonomous vehicles and advanced mobility technologies.

Software Engineer Intern

General Motors

June 2021 – August 2021 Detroit, MI

- Augmented vehicle emergency systems by optimizing the OnStar Activity Map webapp to allow easier and more intuitive access of emergency systems
- Migrated from running spark jobs in each data center for our **Hadoop** cluster to implementing replication
- Wrote, tested, and debugged using **Java**, **JavaScript**, and **Chrome Developer Tools**
- Leveraged **Maven** for backend build automation and **WebLogic** for webapp deployment

ML/Image Processing Researcher

University of Michigan Biomedical & Clinical Informatics Lab

Sep. 2020 – April 2021 Ann Arbor, MI

- Developed **Image Processing** software to analyze abdominal CT scans for segmenting pancreas using **Machine Learning** in **Python** and **MATLAB**.
- Paid research under Dr. Soroushmehr on behalf of the Undergraduate Research Opportunity Program
- Achieved Dice-Sørensen Similarity Coefficient of 54.33% using U-NET Convolutional Neural Network

PERSONAL PROJECTS

Street Fighter II AI

github.com/agamkohli9/street-fighter-ii-ai.git

- AI based on Deep Q **Reinforcement Learning** and **Convolutional Neural Network** that plays SNES game Street Fighter II
- Written using **Python** frameworks **PyTorch** for RL and CNN and **Gym Retro** for emulation.
- Wins 88% of matches compared to a random model that wins 23% of matches.

CSGO Economy Calculator

github.com/agamkohli9/csgo-economy-calculator.git

- Written using **K Nearest Neighbor ML algorithm** from **Python** framework **Scikit-Learn** to predict optimal round type strategy given teams' economy in video game Counter Strike: Global Offensive.
- Trained model with CSV file containing statistics of 9420 professional rounds with an average of 66% accuracy

PROGRAMMING SKILLS

Python | Java | C++ | MATLAB | JavaScript | Linux | Bash | Git | Hadoop | Agile | Scrum | Lex/Yacc

CERTIFICATIONS

SAFe 5.0 Practitioner

- Scaled Agile Framework team member responsible for using Scrum, Kanban, and Extreme Programming

COURSEWORK

Algorithms | Machine Learning | Compiler Construction | Computer Vision | Discrete Math | Web Systems

STRENGTHS

Teamwork
Worked in Agile teams, completing user stories by pair programming

Open Source Developer
Avid contributor of the **Linux** Kernel: the world's largest open source project