

EDUCATION

Kennesaw State University

Master of Science in Computer Science

Kennesaw, GA

Expected May 2022

Kennesaw State University

Bachelor of Science in Computer Engineering

Kennesaw, GA

Awarded May 2020

SKILLS

Languages: Python, Go, Julia, C, C++, Java

Technologies: Docker, Git, Linux, Nix

Other: Algorithm Development, Machine Learning, Tensorflow, Flask, Google Cloud Platform, SQL

EXPERIENCE

Software Engineer Intern

NCR

Atlanta, GA

May 2021 - Present

- Constructed a Go retail microservice to allow selling lottery tickets at NCR self-checkout terminals
- Reduced PostgreSQL database load by 10% by caching frequently requested data in Redis
- Developed a machine learning solution to reduce self-checkout transaction times and costs
- Helped drive innovation by submitting 3 invention disclosure reports to the patent review board
- Improved developer productivity by creating scripts to generate code for wrapping business logic with commonly used features such as logging, validation, and tracing

Graduate Research Assistant

Kennesaw State University

Kennesaw, GA

May 2020 - Present

- Attended 2 virtual conferences to present research publications
- Bolstered interdisciplinary research at KSU by collaborating with other research labs
- Proposed a solution for efficient sampling of experiences for training reinforcement learning models
- Created a machine learning application for rehabilitation of currently unsupported stroke patients
- Expanded a clustering algorithm to initialize centroids up to 20% more effectively for segmentation of hyperspectral images
- Developing a machine learning pipeline to support ecological research based on texture analysis methods

PROJECTS

Nutriverify (Patent Pending)

Summary: Analyzes nutrition info with computer vision techniques

NCR Global Hackathon

Summer 2020

- Achieved third place in global hackathon with over 2400 participants
- Worked on a team with a diverse skill set to deliver a vision system demonstration
- Prototyped Python backend with Flask and OpenCV to analyze images and serve extracted information

EMG-Based Wrist Movement Prediction

Summary: Predicts extension or flexion of the wrist to promote stroke patient rehabilitation

IEEE BIBE 2020

Fall 2020

- Cooperated with local startup *Motus Nova* and KSU ECE department
- Devised a data collection method and automatically labelled collected data from 4 patients
- Designed an algorithm and deployed to an embedded system to predict the direction of motion in real-time

COMMUNITY

- Awarded the rank of Eagle Scout by Boy Scouts of America in 2014
- Attended 8 hackathons including 5 virtual hackathons