EDUCATION

Kennesaw State University

Kennesaw, GA

Master of Science in Computer Science

Expected May 2022

Kennesaw State University

Kennesaw, GA

Bachelor of Science in Computer Engineering (Magna Cum Laude)

Awarded May 2020

SKILLS

Languages: Python, Go, Julia, Nix, LaTeX

Technologies: Git, Linux, Docker, Tensorflow, OpenCV, SQL, GCP

Others: Machine Learning, API Design, Eagle Scout

EXPERIENCE

Software Engineer Intern

Atlanta, GA

NCR

May 2021 - August 2021

- Constructed a Go retail microservice for selling lottery tickets to corner a percentage of the global lottery market
- Improved developer productivity by automatically generating decorators for business logic with commonly used features such as logging, validation, caching, and tracing
- Submitted a machine learning based invention to reduce self-checkout transaction times and costs

Graduate Research Assistant

Kennesaw, GA

Kennesaw State University

May 2020 - Present

- Proposed a solution for efficient sampling of experiences for training reinforcement learning models
- Created a reinforcement learning environment to allow an agent to learn to make classifications based on EMG data
- Expanded a clustering algorithm to initialize centroids up to 20% more effectively for image segmentation
- Developed a machine learning pipeline to support ecological research based on texture analysis methods

Software Engineer Intern

Atlanta, GA

NCR

May 2020 - August 2020

- Created a backend web application for an innovative mobile self-checkout solution
- Programmed maintainable and efficient code that impacted new microservice products by serving as a template
- Achieved third place in the NCR global hackathon with over 2400 participants by demonstrating an application for examining nutrition information in the context of the user's goals

Research Assistant

Kennesaw, GA

Kennesaw State University

Jan 2019 - May 2020

- Developed a serial interface from a microcontroller to a motor contoller to create an autonomous wandering robot
- Improved robot wandering algorithm efficiency by 70% with a key image processing insight
- Collaborated with other assistants to create research proposals and receive funding

Research

EMG Based Simultaneous Wrist Motion Prediction Using Reinforcement Learning October, 2020

Noah Gardner et al.

IEEE 20th International Conference on Bioinformatics and Bioengineering

ISODS: An ISODATA-Based Initial Centroid Algorithm

March, 2021

Noah Gardner et al.

The 10th International Conference on Information

PATENT APPLICATIONS

NutriVerify by Noah Gardner et al. (equal contribution)

NCR, September 2020

Paperless Lottery Tickets by Noah Gardner et al. (equal contribution)

NCR, September 2021