

EDUCATION

Kennesaw State University*Master of Science in Computer Science*

Kennesaw, GA

*Expected May 2022***Kennesaw State University***Bachelor of Science in Computer Engineering (Magna Cum Laude)*

Kennesaw, GA

*Awarded May 2020*SKILLS

Languages: Python, Go, Julia, Nix, LaTeX**Technologies:** Git, Linux, Docker, Tensorflow, OpenCV, SQL, GCP**Others:** Machine Learning, API Design, Eagle ScoutEXPERIENCE

Software Engineer Intern

NCR

Atlanta, GA

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
- Accomplished 3 approved inventions and 2 patents submitted through the patent review board

Graduate Research Assistant

Kennesaw State University

Kennesaw, GA

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

NCR

Atlanta, GA

May 2020 - August 2020

- Created a backend web application for a new mobile self-checkout solution
- Achieved third place in the NCR Global hackathon with over 2400 participants
- Accomplished 1 approved invention accepted as a patent through the patent review board

Research Assistant

Kennesaw State University

Kennesaw, GA

Jan 2019 - May 2020

- Developed a serial interface from a microcontroller to a motor controller 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**

Noah Gardner et al.

*March, 2021**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*