Noah Gardner

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github.com/ngngardner

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 — *Awarded May 2020*

University of North Georgia — Dahlonega, GA
Associate of Science in Engineering — *Awarded May 2017*

Skills

Languages (Strong): Python, Go, Julia
Languages (Proficient): C, C++, Java
Technologies: Docker, Git, Linux, Nix
Environments: Github, Tensorflow

Experience

- **NCR** — Atlanta, GA
  Software Engineer Intern — *May 2021 - Present*
  - Constructed a Go retail microservice to allow selling lottery tickets at NCR self-checkout terminals
  - Reduced PostgreSQL database load 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 2 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
- **Kennesaw State University** — Kennesaw, GA
  Graduate Research Assistant — *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 more effectively initialize centroids for segmentation of hyperspectral images
  - Developing a machine learning pipeline to support myrmecological research based on texture analysis methods

Projects

- **Nutriverify (Patent Pending)** — NCR Global Hackathon
  ***Summary**: Analyzes nutrition info with computer vision techniques* — *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** — IEEE BIBE 2020
  ***Summary**: Predicts extension or flexion of the wrist to promote stroke patient rehabilitation* — *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
- Active member of the KSU Apprentice Club, a professional practice club for Computer Engineers