# Noah Gardner

ngardn10@students.kennesaw.com
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*

## 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** — Atlanta, GA
NCR — *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, GA
Kennesaw State University — *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)** — 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