Nathan D. Koenigsmark

Electrical Engineer

2230 forest hill rd. marriottsville MD, 21104
(443) 303 -9183
ndkoenigsmark@gmail.com

Technical Skills

C - Experienced, over four years of active classes and projects in C including usage in DSP systems.
Python - Experienced, two years of classes and project usage in Python.
Java - Very Proficient, two years of active classes in Java.
X86 - Assembly - Very Proficient, two years of classes including assembly.
Matlab - Proficient, five years of miscellaneous Matlab usage and assignments.
Verilog - Competent, two years of class in Verilog designing FPGA systems.
JavaScript - Some Exposure- Developed a small web app as a personal project.
Excel - Very Experienced, 5 years of regular and active excel usage.

Projects/Experience

Autonomous Interacting Robot

Fall 2019

- Worked in a three man team to develop an autonomous robot
- smoothly tracked and followed a target in real time via python based computer vision
- responded to voice commands via amazon's alexa custom skill API
- Communicated and cooperated with other teams robots via a flask server to achieve swarming behavior.

Mixed-Terrain Surveying Robot

Spring 2016
- Worked on a extended 3 month 8 team man design project
- Lead half of team in hardware/software development
- Placed first out of 10 8 man teams on similar projects

Heuristic Based Chess Engine

Spring 2020
- Developed a chess engine in python implementing alpha beta heuristics

Education

University Of Maryland , College Park - *B.S. in Electrical Engineering*

August 2015 - May 2020

A. James Clark School of Engineering, Specialized in communications and signal processing with a 2.54 GPA, took additional coursework in computer science