

KARTHIK PRATURU

Atlanta, GA, 30332 • kpraturu@gatech.edu • 770-508-0712
U.S. Citizen

OBJECTIVE

Current student looking to gain experience through an internship program related to Electrical Engineering or Computer Science.

EDUCATION

Georgia Institute of Technology

Atlanta, Georgia

- Candidate for BS in Electrical Engineering *Expected Graduation: May 2019*
 - GPA: 3.96
 - Relevant Coursework: Circuit Analysis, Digital Design, Microelectronic Circuits, Power Electronics
- Candidate for BS in Computer Science *Expected Graduation: May 2019*
 - Concentration: Intelligence and Computer Architecture
 - GPA: 4.00
 - Relevant Coursework: Data Structures and Algorithms, Combinatorics, Machine Learning, Processor Design

ACTIVITIES

Yellow Jacket Space Program, Atlanta, GA

May 2017 – Present

Developing a reusable rocket capable of testing scientific payloads in space
Avionics Hardware Lead

- Developed an engine controller board for communications with and control of a liquid-fueled engine

AI MOBA Competition, Georgia Tech

July 2017

AI controlled heroes and minions competing against enemy AI

- Used Python to create navigational meshes for map representation and A* with path smoothing for navigation
- Agents controlled by state machines and behavior trees
- Tied for 1st Place

HACKFSU, Tallahassee, Florida

February 2016

Virtual Reality Device for CAD Manipulation

- Used C# and Unity Game Engine to create a more intuitive means to manipulate 3D Object Files
- Connected multiple hardware devices to a single Android phone

WORK EXPERIENCE

GTRI, Atlanta, GA

Summer 2016 - Present

Student Assistant for Electro-Optical Systems Innovation Division

- Wrote control code in C++ and C for multiple components of a full LIDAR system
- Designed safety circuits for protection against laser faults
- Debugged and assembled a hardware hub for controlling connected devices
- Built an asynchronous port reader/writer using C++ for high speed serial communication
- Modelled hardware to represent gain compression and noise filtering of analog signals

SKILLS/INTERESTS

Programming: C++, C, Java, Python, Matlab, HTML, CSS, JavaScript

Platforms: Linux (Debian-based, Arch-based), Unix, Windows

AI: Machine Learning, Planning and Pathfinding, Procedural Content Generation

Architecture: Embedded Systems (Arduino, Mbed, PSoC), Processor and FPGA Design (Verilog)

Electronics: Circuit Design with Eagle, Circuit Simulation with PSpice, Soldering

Interests: Video Game Design