Shreyas Gatuku

5032 Forbes Avenue, SMC 6041, Pittsburgh, PA 15289

(571)-333-7827 • sgatuku@andrew.cmu.edu • shreyasg.xyz

Education

Carnegie Mellon University, Pittsburgh, PA
Bachelor of Science in Electrical and Computer Engineering 2015 – 2019
Intended Additional Major in Robotics
GPA: 3.52

Experience

Northrop Grumman, Baltimore MD Summer 2017
Digital Verification Intern
- Constructed driven and randomized test environments for FPGA driven RTL radar sub-systems
- Used UVM, System Verilog, C, and MATLAB to build expandable and reusable test benches
- Trained in AXI4Stream/AXI4Lite IP and DPI-C interfacing
- Collaborated closely with MATLAB and RTL designers to ensure the functionality of the systems

Sprint, Reston VA Summer 2016
Web Developer Intern
- Worked on the maintenance and performance of the corporate website
- Used data analysis tools such as Elk, Splunk, and Keynote

Projects

Super Mario Bros. Map Developer 2016
Term Project
- Programmed a software tool that converts hand-drawn game maps to virtual playable game levels
- Uses Python and Python Libraries (openCV, Tkinter)

SmartLock 2016
Personal Project
- Built an embedded system driven by Arduino to securely unlock/lock door handles through a web application

Garage Assist 2016
Personal Project
- Built an embedded system driven by Arduino to alert drivers the optimal parking position in a consumer garage

Flow 2016
Personal Project
- Built a web application to generate and visualize dance routes
- Used across the nation by dance teams from all dance circuits

Activities

Carnegie Mellon Racing, Pittsburgh, PA 2015-2016
- System Lead for the Rear Sensor Module which controls coolant pumps/fan, damper position sensors, etc.

FIRST Robotics, Leesburg, VA 2011-2015
Member and Competitor (Lead Designer, Electrical Engineer, Mechanical Engineer, Driver)
- FRC: 1st place Rookie Inspire Award Regionals, Competed in World's Championship St. Louis

Skills/Courses

FPGA/RTL Design, System Verilog, Assembly, UVM, MATLAB, Python, Arduino, C, PHP, MySQL, HTML-CSS-JavaScript, CAD

Relevant Coursework

Structure & Design of Digital Systems, Computer Systems, Real-Time Embedded Systems, Fundamentals of Control, Signals & Systems