NABID FARVEZ

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EDUCATION

GEORGIA INSTITUTE OF TECHNOLOGY, *Atlanta, GA* (Anticipated Spring 2022)

- **Bachelor of Science in Computer Engineering,** GPA: 4.0
- **Stamps President's Scholarship** (Top 1% of college applicants)

Relevant Coursework: Data Structures & Algorithms, Object-Oriented Programming, Circuit Analysis, Signals & Systems, Programming HW/SW Systems, Digital Systems Design & Intro FPGA Lab

EXPERIENCE

JOHNS HOPKINS UNIVERSITY APPLIED PHYSICS LAB, *Laurel, MD* (~~Summer 2020~~)

Engineering Intern – Space Exploration Sector CANCELLED due to pandemic ☹

BIOMEDICAL MICROSYSTEMS LAB, *Atlanta, GA* (Spring 2019 – **Present**)

Undergraduate Research Assistant

- Wrote Python script to automate microscope scanning for cell detection with OpenCV
- Constructed fluid-pump apparatus using AVR-controlled solenoid valves
- Designing PCB for time-division multiplexing access of Coulter counter signals

GT SCHOOL OF PHYSICS, *Atlanta, GA* (Fall 2019)

Undergraduate Teaching Assistant

- TA for Physics 2211: Newtonian mechanics with lab focus on modeling with Python
- Explain physical phenomena and supervise lab execution in room of 30+ students
- Grade and provide feedback to students on weekly quizzes

KIDS 4 CODING, *Lawrenceville, GA* (Summer 2019)

Instructor

- Taught courses in Python, Web Development, Game Design, Robotics, and Circuitry
- Curated lesson plans for technical concepts as well as careers in computer science
- Managed and supervised classroom of 16 kids from ages 8 to 15

PROJECTS

GT Emblem – ARM mbed RPG Game (demo)

- Created turn-based RPG game using ARM mbed platform on LPC1786 microcontroller
- Interfaced microcontroller with buttons, LCD screen, speaker, accelerometer
- Coded program in C including implementation of hash table to monitor map items
- Verified hash table using gtest unit testing framework and valgrind for memory leaks

SKILLS/TOOLS

Programming: Python, C, MATLAB, Java, Git, MySQL, HTML & CSS, VHDL

Electronics/Tools: Soldering, PCB layout (KiCAD/Eagle), Arduino/Raspberry Pi/ARM mbed, Oscilloscope, Laser Cutter, 2-Layer PCB Fabrication Tools

Modeling/Design: SolidWorks, Blender, Google SketchUp, 3D Printing (Cura, GrabCAD)

Miscellaneous: Unity Game Engine (C#), Video Editing (Adobe Premiere, Final Cut)

LEADERSHIP

INTERDISCPLINARY DESIGN COMMONS (IDC), *Atlanta, GA* (Fall 2019 – **Present**)

Peer Instructor

- Maintain student-run electronics makerspace on college campus
- Trained in equipment: 3D printer, laser cutter, PCB fab, electronic benchtop tools
- Volunteer and plan community workshops (i.e. Halloween soldering, LED Lamps)
- Troubleshoot and aid users with their projects and educating in equipment use