Thomas Owens

thomas.owens282@duke.edu (919) 616-0089 github.com/thomas1400

EDUCATION

Duke University

B.S.E. in Electrical and Computer Engineering and Computer Science GPA 3.84 / 4.0 - Dean's List Fall 2018, Spring 2019

May 2022 Expected

WORK EXPERIENCE

Duke Engineering First Year Design, Durham, NC

Teaching Assistant

August 2019 - Present

- Mentor two teams of five first-year engineering students: teach skills including programming, circuitry with microcontrollers, CAD, 3D printing, laser cutting, and woodworking.
- Review written assignments and presentations to improve student communication.
- Conduct self-guided technical and interpersonal learning to better assist project teams.

Summer Intern May 2019 - August 2019

- Redesigned class materials including technical instruction, video lectures, and quizzes leading to greater student engagement and higher-quality technical work.
- Prioritized and scheduled tasks and meetings for a small team of interns.

Trinity Technology Services, Durham, NC

Computer Lab Tech

January 2019 - May 2019

- Facilitated use of the recording, printing, and visualization labs at Smith Warehouse.
- Maintained machines and troubleshot problems to enhance user experiences.
- Rapidly achieved targeted goals to meet customer needs.

EXTRACURRICULARS

Team GECCO (Gel Ethanol Cervical Cancer Obliterator) at Duke

2019-2020 Expected

- With an interdisciplinary undergraduate team, develop and patent a low-cost electromechanical device for the ablation of cervical cancer.
- Engineer a clinical product to stringent client and regulatory specifications in order to improve the standard of care for cervical cancer in low income South American countries.

Duke Combat Robotics 2019-2022 Expected

- Rapidly design and prototype sophisticated combat robots for internal and national competitions, iterating on designs to optimize form and function.

SKILLS

Programming Proficient in Java, Python, and Arduino. Class experience in data structures and

algorithms; data acquisition and numerical analysis; artificial intelligence.

Expected Spring 2020 experience in advanced software design and implementation; computer architecture; C, Assembly, and Linux.

Electronics Knowledgeable in the basics of analog and digital circuit design and analysis.

Digital Fabrication Experienced in CAD with Fusion 360 and Solidworks, 3D printing, and laser cutting.