Thomas Owens

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EDUCATION

Duke University
B.S.E. in Electrical and Computer Engineering and Computer Science *May 2022 Expected*
GPA 3.9 / 4.0 - *Dean's List with Distinction Fall 2019; Dean's List Fall 2018, Spring 2019*

SKILLS

Software Development	Java, JavaScript, Node.JS, Python, C, C# in Unity, Assembly, and MATLAB. *Relevant coursework:* data structures and algorithms, intro to AI, computer architecture, high-level software design, operating systems.
Electrical Engineering	*Relevant coursework:* computer architecture, signal processing, fields and waves, microelectronics, circuit design and analysis.
Other	Design for manufacturing with Solidworks, Fusion360; Agile Scrum management

EXPERIENCE

Optum - Raleigh, NC
Software Development Intern *June 2020 - August 2020*

- Collaborated with business leaders and an agile team of 6 interns to develop a web-based platform for visualization and management of pharmaceutical shortages.
- Facilitated team planning and productive communication as an Agile scrum master.
- Developed and deployed a Node.JS server to host our platform's back-end API, with integrated MongoDB database and Apache Solr Engine for search.

Duke Department of Electrical and Computer Engineering - Durham NC
Lab Teaching Assistant, Fundamentals of ECE *January 2020 - Present*

- Reinforced electrical engineering concepts through hands-on learning in 15 laboratory exercises.
- Lead a lab section of 12 students as they completed a large-scale design challenge involving the integration of microcontroller-driven autonomous movement, sensing, and communication.

Duke Engineering First Year Design - Durham, NC
Teaching Assistant, Engineering 101 *August 2019 - December 2020*

- Mentored 2 teams of 5 first-year engineering students: taught skills including programming, electronic prototyping with microcontrollers, CAD, 3D printing, laser cutting, and woodworking.
- Facilitated the delivery of a product to reliably monitor and maintain the function of $50,000+ bioreactor-based experiments in the Marcus Center for Cellular Cures.

Summer Intern *May 2019 - August 2019*

- Designed class materials with the goal of greater student engagement and higher-quality technical work, including over 110 minutes of video lectures, online technical instruction with over 7,500 views, and 5 comprehensive technical learning projects that will be completed by 250+ first-year engineers each year.

DEVELOPMENT PORTFOLIO

I develop software and scripts for a variety of practical and fun applications, from automation to gaming. Take a look and try some out on my website at *thomas1400.github.io*, or see the source code on GitHub at *github.com/thomas1400*.