

MICHAEL D'ARGENIO

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Raleigh, NC 27606

Education	North Carolina State University, Raleigh, NC		
	M.S. Computer Engineering	GPA: 4.0	Graduation: May 2020
Experience	B.S. Electrical Engineering		
	GPA: 3.7		
Skills	Graduation: Dec 2014		
	Teaching & Communication Certificate: Completed 100 hours of coursework studying effective teaching practices and research. Developed and delivered curricula in-person and online for diverse audiences.		
Current Work Experience	Relevant Projects: JPEG Decoder, FatFS SD Datalogger, LCD Graphics Driver, Waveform Generator, miniC Compiler, Memory Cache, Branch Prediction, ecoPRT Vehicle Control System, GPS Line-Following Car		
	Research: Developing course materials, design tools, and projects for embedded systems courses.		
Prior Work Experience	Programming: C, C++, Matlab, Python, HTML/CSS, Javascript, Verilog, Java, Visual Basic, LLVM, Flex/Bison		
	Educational Dev Platforms: Arduino, Raspberry Pi, Scratch, FRDM ARM Cortex MCUs		
Prior Work Experience	Other Skills: Rapid product prototyping, soldering, circuit board prototyping/fabrication, 3D printing, lab management, mechanical assembly, grant/technical/blog writing, broadcast communication		
	North Carolina State University, Raleigh, NC		
Prior Work Experience	Electrical & Computer Engineering Summer Camp Coordinator/Instructor, Mar 2020-present		
	<ul style="list-style-type: none">Redesign "Robotics in Reality" workshop to create a more dynamic and interactive environment.		
Prior Work Experience	Teaching Assistant for Electrical & Computer Engineering Senior Design Courses, Jul 2018-present		
	<ul style="list-style-type: none">Oversee a lab with tools, equipment, and components for the 200 students in the design program.Manage course materials/websites, grade assignments, and develop supplemental materials.Teach workshops on embedded software development and debugging methodology.Provide technical and management expertise for projects across a wide variety of disciplines.Proposed and mentored a project for undergrads to design a product to improve home router security.		
Prior Work Experience	Raleigh Community Kickstand Bicycle Cooperative, Raleigh, NC		
	Co-Founder, Webmaster, Database Application Developer, & Mechanic, May 2017-present		
Prior Work Experience	<ul style="list-style-type: none">Helped found an all-volunteer, non-profit that pools community resources, repairs bicycles, teaches maintenance skills to enable access to safe, reliable, self-sufficient transportation for those in need.		
	Duke University Talent Identification Program (TIP), Durham, NC		
Prior Work Experience	Instructor for Electrical Engineering Course, Summer Studies Program, May 2019-Aug 2019		
	<ul style="list-style-type: none">Designed a rigorous course covering analog circuits, digital logic, power systems, programming, and product development to provide authentic, hands-on engineering design experiences in a lab setting.Facilitated a dynamic, creative learning environment in which students collaborated to engage with course material through discussions, practice problems, lab exercises, activities, and projects.Fostered an open, colloquial classroom in which the students discussed and presented on the NAE's Grand Challenges for Engineering and thought critically about the role of engineers within society.Students conceived and created final design projects, including Spirograph, Tetris, Medication Tracker, Sidescroller, Snake, DanceBot, DDR, Magic Piano, Fetchbot, Name that Tune, D&D Helper, LED Matrix.		
Prior Work Experience	Schneider Electric, Staff Electronics Engineer, Raleigh, NC		
	Senior Electronics Hardware Developer, Electronics Design Group, Aug 2017-Mar 2018		
Prior Work Experience	<ul style="list-style-type: none">Simulated, developed, and tested embedded hardware and generated supporting documentation.Designed a safety interface module which provides a safe-stop operation to critical system.Designed an analog input/output module for current, voltage, and temperature.		
	University Senior Design Project Coordinator, Jan 2016-Mar 2018		
Prior Work Experience	<ul style="list-style-type: none">Created project proposals, generated funds, managed projects, and mentored students.		
	Continuous Engineer, NA Electric Vehicle Products, Feb 2015-Aug 2017		
Prior Work Experience	<ul style="list-style-type: none">Evaluated customer returns using 8D-analysis to determine root cause and implement containment, corrective, and preventative actions based on the failure mode.Led product adaptation projects for range expansion, component obsolescence, cost reduction, etc.Explored trends, participated in standards committees, and developed new product proposals.Managed continuous engineering budget and project plan for product line.		
	Duke Energy, Co-Op, Charlotte & Raleigh, NC		
Prior Work Experience	Protection/Control Engineering & Transmission Asset Management, Feb 2015-Aug 2017		
	<ul style="list-style-type: none">Developed a program to store parts data and generate standard transmission line structure drawings.Analyzed and created a summary report document on dynamic line rating technologies.Configured substation data managers and HMIs to monitor and control relays within a substation.Developed standards to upgrade from serial to IP communications for control of protective relays.		
Prior Work Experience	WKNC Raleigh 88.1 FM, NC State University, Raleigh, NC		
	Program Director: Aug 2013-May 2014		
Prior Work Experience	// Operations Manager: Sep 2011-Aug 2013		