Yuyi Shen

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Education	**Carnegie Mellon University** Pittsburgh, PA Expected Graduation: May 2020 Bachelor of Science in Electrical and Computer Engineering Cumulative QPA: 3.93/4.00
Relevant Coursework	Electronic Devices and Analog Circuits Fundamentals of Semiconductor Devices Microelectronic Circuits Introduction to Embedded Systems

Skills

Languages:	Software:	Hardware:
Python	Git	Vector network analyzers
R	LaTeX	Spectrum analyzers
C	LtSpice	RF probe stations
SystemVerilog	Kicad	PCB layout and simulation
	Advanced Design System	
	Matlab	

Work Experience

Carnegie Mellon University PMaNS Lab Pittsburgh, PA
ECE Summer Intern   Summer 2019

- Designing a phase modulator based off of a lateral overtone bulk acoustic resonator (LOBAR)
- Investigating the applications of a LOBAR-based phase modulator for electronic frequency comb generation

S&C Electric Company Alameda, CA
Summer Intern   Summer 2018

- Developed and fitted current transformer models to overcurrent control CT
- Applied CT modeling to secondary injection testing with overcurrent protection relay

Carnegie Mellon University PMaNS Lab Pittsburgh, PA
Undergraduate Research Assistant   Fall 2017-Present

- Assisted with layout, fabrication, and troubleshooting of 70 H-bridge PCB for driving electro-permanent magnets
- Collaborated with master's student to program H-bridge PCB for communications with onboard SMPS over SPI and computer control over USB
- Designed and prototyped buffered VHF oscillator circuit for demonstrating low ESR MEMS resonators
- Characterized MEMS devices (resonators and delay lines) with RF probe stations

Activities

Robotics Club, Carnegie Mellon University   2016-Present

- Used Robotics Club equipment to prototype personal projects, including 2 voltage rail splitters, a boost converter, and a transimpedance amplifier for a field mill

Chem-E Car, Carnegie Mellon University   2016-Spring 2018

- Helped develop thermoelectric power supply for small robotic car
- Constructed and documented Arduino modules for control of small robotic car

Honors

Dean's List, College of Engineering: Fall 2016-Spring 2019