Alexander D. **Gotsis**

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Education

Carnegie Mellon University — *Pittsburgh, Pennsylvania*

B.S. in Electrical and Computer Engineering — *Expected May 2019*

- Overall GPA 3.61/4.00 as of September 2017
- Carnegie Institute of Technology Dean's List Fall 2015 and Spring 2017

Selected Coursework

Structure and Design of Digital Systems	Introduction to Imperative Programming	Rapid Prototyping I/II	Calculus I/II/III
Intro to Computer Systems	Fund. of Electrical Power Systems	Intro to Embedded Systems	Physics I/II for Engineers

Experience

Robotany — *Pittsburgh, Pennsylvania*

Electrical Engineering Power Systems Intern — *May 2017 - PRESENT*

- Design 3-phase delta 240V electrical power system for robotic vertical farm, fixture wiring, and control racks.
- Specify and implement power system including conduits, transformers, and load centers. Manage and direct assembly teams.

Ben Peoples Industries — *Pittsburgh, Pennsylvania*

Embedded Software Developer — *Oct. 2017 - PRESENT*

- Develop and improve C code related to time synchronization of custom architectural lighting controller. Synchronization is important to endure that effects are uniform across distributed applications.

Auditory Lab (Profs. Heller and Grover) — *Pittsburgh, Pennsylvania*

Electrical and Computer Engineering Research Assistant/System Administrator — *May 2016 - May 2017*

- Engineer mobile application intended to assist in teaching echolocation skills to visually impaired persons on an interdisciplinary team with the Psychology and ECE departments under Professors Heller and Grover.
- Provide back-end design for and administrate data collection server.

Eberly Teaching Center — *Pittsburgh, Pennsylvania*

Eberly Teaching Center Developer — *Sept. 2016 - Dec. 2016*

- Design and implement programmatic online course tools with JavaScript and jQuery for the Open Learning Initiative.
- Light system administration work.

Projects & Extracurricular Activities

- **Build 18 Hardware Hackathon** Builder (January 2017)
  During a weeklong Hardware Hackathon, designed and implemented a protocol for driving a 96 x 64 RGB LED Matrix via an FPGA in SystemVerilog. We used this display to show programmatically derived 3D animations.
- **Activities Board Technical Committee** Core Member & Executive Board (2016)
  Entirely student driven, as a member of the Executive Board, lead, plan and implement event production services for campus events from small events to well known concert performers, implementing complex 3-phase power systems, and high grade audio and lighting rigs.
- **CMU Explorers Club** Member, Hiking Chair & Treasurer (2016)
  CMUX is an outdoors club dedicated to making outside more accessible, and encouraging others. Organize hikes as hiking chair.
- **Formula SAE Electric** Member
  Part of a team building an all-electric racecar, designing and manufacturing all components of the car, to compete with other teams.

Skills/Hobbies

C	UNIX Systems	ARM	Python	Java	Power Systems	National Electrical Code	AutoCAD / SolidWorks
SystemVerilog	FPGA	x86	C#	Lab Equipment	Rapid Prototyping	Production Management	Hiking/Backpacking