

Sam Celani

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CAREER OBJECTIVE

Gain further understanding of the industry and real-world experience on practical engineering projects through an **internship or** summer/fall **co-op**.

EDUCATION

Michigan Technological University – Houghton, MI August 2014 – May 2019
Bachelor of Science in Computer Engineering
Department GPA: **3.07** | Cumulative GPA: 2.87
Michigan Technological University – Houghton, MI Expected Graduation May 2021
Master of Science in Electrical Engineering | **GPA: 3.20**
Active Alum of Wireless Communications Enterprise **Member of Keweenaw Pride**

PROJECT EXPERIENCE

Vice President, Wireless Communications Enterprise

Bird Sensor Team – Project Engineer

- Created a low-cost, low-maintenance sensor to aid in a time study of bird strikes on windows
- Primarily in charge of programming (Arduino)

EV Smart Charge Team – Project Manager

- Designed communication structure between Python simulation and Android application

Translation Lookup Pairs – Personal Project

github.com/sacelani/TLPr.git

- Personal project developed to help myself learn Russian
- Dictionary-based data structure, separated syntactically for specially formatted output
- CLI for grammar help menu and add/edit/delete ‘Eng -> Rus’ pairs
- Basic Italian port – github.com/sacelani/TLP.git
- Metadata for topic-based searching and word dumps

WORK EXPERIENCE

Advanced Power Systems Research Center – Calumet, MI May – August 2018 and 2019
APRA-E Project: NEXTCAR – **Research Assistant/Intern**

- Developed software for wireless V2V, V2C, V2I, and C2V communications using AMQ Protocol
- Intelligently redesigned routing topology for efficient, cycle-free, robust communication
- Developed ease of access tools for navigating the terminal
- Used Simulink, Python (pika module), RabbitMQ (message broker), Cohda DSRC (V2I transceiver)

US Manufacturing – Warren, MI

June 2016 – August 2016

Continuous Improvement – Quality Intern

- Managed daily line defect sheets and Pareto of Defects for several manufacturing lines
- Introduced new system for organizing defect sheets

Elec/Comp Learning Center Coach – Houghton, MI

Jan 2018 – Dec 2019

Intro To Microcontrollers (EE3171) TA – Houghton, MI

Jan 2020 – May 2020

Embedded Systems Interfacing (EE4737) TA – Houghton, MI

Jan 2020 – May 2020

TECHNICAL SKILLS

- | | |
|---------------------------|-----------------------------------|
| • Microcontrollers | • Algorithmic design and analysis |
| • CLI Programming and UIs | • Basic Control theory and design |
| • Embedded Programming | • Microsoft Office |

LANGUAGES

Fluent	Proficient	Familiar	Learning
• Python	• Assembly	• Go	• Rust
• Java	• C++	• Mathematica	• Russian
• C	• Verilog	• Matlab	• Norwegian