**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 January 2021

Master of Science in Electrical Engineering

**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**](github.com/sacelani/TLPr.git)

* Personal project developed to help myself learn Italian
* Dictionary-based data structure, separated syntactically for specially formatted output
* CLI for grammar help menu and add/edit/delete ‘Eng -> Ital’ pairs
* Basic Italian port **–** [**github.com/sacelani/TLP.git**](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 – Present

**Intro to Electronics (EE3131) Grader –** Houghton, MI Sep 2018 – Present

**TECHNICAL SKILLS**

* Microcontrollers
* CLI Programming and UIs
* Microsoft Office
* Embedded Programming
* Algorithmic design and analysis
* Basic Control theory and design

**LANGUAGES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fluent** | **Proficient** | **Familiar** | **Learning** |
| * Python | * Assembly | * C# | * Go |
| * Java | * C++ | * Mathematica | * Ruby |
| * C | * Verilog | * Matlab | * Russian |