**CAREER OBJECTIVE**

Recent university graduate with 3+ years of hardware and software development experience. Possess a bachelor’s degree in Computer Engineering, with a strong focus on communication systems and embedded programming. Looking to utilize my skills and knowledge in a new position in my field.

**EDUCATION**

**Michigan Technological University – Houghton, MI** August 2014 – May 2019

Bachelor of Science in Computer Engineering

Department GPA: **2.91** | Cumulative GPA: 2.87

**Outstanding Teaching Award**

**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)

Translation Lookup Pairs **– Personal Project** [**github.com/alexander-the-alright/TLPr.git**](file:///C:\Users\The%20Guy\Desktop\Everything\Grad%20School\resumes\github.com\alexander-the-alright\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/alexander-the-alright/TLP.git**](file:///C:\Users\The%20Guy\Desktop\Everything\Grad%20School\resumes\github.com\alexander-the-alright\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 – May 2021

**Embedded Systems Interfacing (EE4737) TA –** Houghton, MI Jan 2020 – May 2020

**Hardware-Software Integration (EE3173) TA –** Houghton, MI Sept 2020 – May 2021

**Electronics (EE3131) TA –** Houghton, MI Jan 2021 – May 2021

**TECHNICAL SKILLS**

* Microcontrollers
* CLI Programming
* Embedded Programming
* IAR Workbench
* Quartus, Qsys, and AMP
* Algorithmic Design/Analysis
* Unix and Windows Development
* Microsoft Office
* Software Testing
* Basic Analog Control Theory/Design

**LANGUAGES**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fluent** | **Proficient** | **Familiar** | **Learning** |
| * Python | * Assembly | * Go | * Rust |
| * Java | * C++ | * Bash/Batch | * Russian |
| * C | * MatLab | * Verilog | * Norwegian |