Sam Alexander Celani

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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**
- 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**
- Metadata for topic-based searching and word dumps

WORK EXPERIENCE

Pilot Systems International – Farmington Hills, MI   May 2021 – Present
   Associate Systems Engineer
- Wrote system and software level test scripts for a Vector HIL system
- Performed manual System of System testing using CANalyzer

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)

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
- Quartus, Qsys, and AMP
- Algorithmic Design/Analysis
- Unix and Windows Development
- Embedded Programming
- IAR Workbench
- Microsoft Office
- Software Testing
- CANalyzer

LANGUAGES

Fluent	Proficient	Familiar	Learning
Python	Assembly	C++	Norwegian
Java	Go	MatLab	Russian
C	Bash	Verilog	Julia