ARTEM KULAKEVICH

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EDUCATION

Master of Science Degree, Electrical Engineering **GPA: 4.00 / 4.00** **June 2019 – Present**
Portland State University Portland, OR

Bachelor of Science Degree, Electrical Engineering **GPA: 3.97 / 4.00** **September 2017 – June 2020**
Portland State University *Summa cum laude* Portland, OR

WORK EXPERIENCE

Production Specialist III **December 2016 – Present**
Micro Systems Engineering, Inc. Lake Oswego, OR

- Run and troubleshoot at least 8 major production processes; more certifications than any other specialists on shift. Perform regular preventative maintenance and calibration on equipment.
- Analyze electrical failure using Eagle and Allegro and troubleshoot mechanical systems using knowledge conveyor systems and hardware alignment. Repair at least 1 mechanical system or electrical fixture per week.
- Lead a team of 8 production specialists multiple days a week by designating tasks for each person and identifying stalls in the workflow. Deal with communication issues between engineering and production staff.

Module Imaging Cell Internship Project **September 2019 – January 2020**
Micro Systems Engineering, Inc. Lake Oswego, OR

- Updated and validated LabVIEW software used in automation of 3 different 4-axis production imaging robots that reduced chances of collision. Added extra data logging for 500 – 1000 medical devices daily.
- Modified an outdated workflow process for defibrillator product by retraining a 6-axis Epson robot. Reduced human handling and process time for 200 – 600 defibrillators per week.
- Improved documentation by updating 3 design documents, creating a new record document, and a new standard operating procedure (SOP) document.

SKILLS

- SystemVerilog / Verilog
- C++ / C
- ADC, SPI, I2C, RS-232
- ARM Assembly
- LabVIEW 12.0
- Soldering
- Oscilloscope
- DMM
- LTspice
- Git (Github)
- Linux (Ubuntu)
- Embedded Rust

PROJECTS

High Assurance Self Balancing Robot - Senior Capstone **January 2020 – June 2020**
Project Sponsor: Galois, Inc. Portland, OR

- Programmed a self-balancing robot to explore methods of control and verification. Modified a Rust compiler in a verification tool called Kind2 to generate embedded Rust code from a language called Lustre.
- Used Kind2 to generate embedded Rust PID and Fuzzy logic controllers from Lustre and found Rust PID to be within 5% of C++ controller for major characteristics. Sponsor's best performing project that year.

Class AB Audio Amplifier **September 2020 – February 2020**

- Designed a 10-watt audio amplifier circuit to gain experience with design process; used LTspice to plan out implementation. Soldered and tested the design using oscilloscope and power resistors.
- Amplifier was easily able to reach 7.94W output with no distortion and 9.8W output with some distortion in a standard audio 0 – 20kHz audio bandwidth.

ARM Sitara AM335x 32-bit Processor **September 2019 – December 2019**

- Utilized ARM assembly and C to program a BeagleBone Black board to communicate with an RC8660 talker board over UART and a NewHaven LCD over I2C.
- Used datasheets and pseudo code to identify and plan modifications for peripherals. Was able to complete all specifications using interrupts and even added supplementary features.

RELEVANT COURSEWORK

- Computer Architecture, Microprocessors 1 & 2, ASIC: Modeling & Synthesis, Digital Integrated Circuits Design