

ARTEM KULAKEVICH

Artem3@pdx.edu • 503.750.3225 • Beaverton, OR
linkedin.com/in/artem-kulakevich/

EDUCATION

Master of Science Degree, Electrical Engineering
Portland State University

GPA: 4.00 / 4.00

June 2019 – Present
Portland, OR

Bachelor of Science Degree, Electrical Engineering
Portland State University

GPA: 3.97 / 4.00
Summa cum laude

September 2017 – June 2020
Portland, OR

WORK EXPERIENCE

Production Specialist III

Micro Systems Engineering, Inc.

December 2016 – Present

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

Micro Systems Engineering, Inc.

September 2019 – January 2020

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- Modified an outdated workflow process for defibrillator product by retraining a 6-axis Epson robot.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

- | | | | |
|-----------------------|----------------|-----------------|---------------------|
| • C++ / C | • LabVIEW 12.0 | • SystemVerilog | • Git (Github) |
| • Embedded Rust | • ARM Assembly | • Oscilloscope | • Linux (Ubuntu) |
| • ADC, SPI, I2C, JTAG | • Soldering | • LTspice | • Fluent in Russian |

PROJECTS

High Assurance Self Balancing Robot - Senior Capstone

Project Sponsor: Galois, Inc.

January 2020 – June 2020

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