Seiya Nozawa-Temchenko

Electrical Engineering

Seiyant01@gmail.com
(778) 991-4574
Vancouver, BC
Seiya Nozawa-Temchenko

Education

Bachelor of Engineering
– Electrical and Computer
University of British Columbia
April 2025
Vancouver, BC

Technical Skills

Software

- Altium Designer
- AutoCAD
- LTspice
- MATLAB / Simulink
- ModelSim
- Quartus Prime
- RSLogix

Programming

- Assembly (ARM v7)
- C / C++
- HTML / CSS
- LaTeX
- Python
- Verilog / SystemVerilog

Hardware

- Reading / writing schematics
- Soldering
- Testing / debugging circuitry with analytical equipment

Languages

- Japanese - Native
- Russian - Native
- German - Professional

Experience

Electrical Engineer
July 2023 - Present
UBC ThunderBikes (Design Team)
Vancouver, BC

- Designed and wired relay system, optimizing placement in a compact racing motorcycle area.
- Reviewed PCB designs with Altium, ensuring accurate component connections and placements; soldered components for final assembly.
- Conducted battery testing and wiring using the Orion BMS.
- Assisted in creating carbon fiber composites for cover and fairings.
- Developed MATLAB-based racing simulation to analyze track performance.

Control Systems Engineer
May 2024 - August 2024
BBA Consultants (Internship)
Vancouver, BC

- Designed wiring diagrams and schematics for BC Hydro's Vancouver Island Terminal project using BlueBeam and AutoCAD.
- Developed Python scripts to automate organization in M-Files and Excel.
- Tested RSLogix ladder logic on PLCs for Valmet's Tailcutter project, involving sensor and alarm control.
- Configured and tested data logger system on PLCs for the Soo River Dam.

Maintenance Engineer
September 2023 - April 2024
IKO Industries (Internship)
Ashcroft, BC

- Automated repetitive tasks using Python, increasing efficiency by 3600% with scripts analyzing 4+ years of data.
- Managed PLCs using RSLogix, integrating sensors, cameras, and lights.
- Submitted design proposals to using Autodesk Inventor to address worker safety and machinery efficiency.
- Integrated two 20-ft Vertical Lift Modules by reviewing electrical and mechanical schematics and drawings.
- Estimated monthly material processing from quarry blasts using GPS coordinates in AutoCAD modeling.

Power Engineer
September 2022 - June 2023
UBC Sailbot (Design Team)
Vancouver, BC

- Contributed to Project Raye, an 18-ft autonomous, unmanned sailing mission from Victoria, BC to Maui, HI.
- Designed rudder motor controller to meet mechanical and software requirements.
- Programmed and tested solar panels, batteries, PCBs, and power systems; rewiring and fixing all post-launch issues.

Solar Sales Consultant
May 2021 - July 2021
SunPower
Boise, ID

- Forecasted annual savings by comparing clients' kWh usage to their annual hours of usable sunlight.
- Promoted and sold solar panels to 97 homeowners, adapting pitches based on real-time observations.
- Executed sales plans, contributing to over $300,000 in revenue growth.

Projects

Maximo Automation Script Suite (IKO Industries) — February 2024
Developed scripts with Selenium and xlwings, enhancing efficiency, data accuracy, and reporting in Maximo operations.

Communication Model for Noise Reduction (UBC, Design Studio II) — June 2023
Developed a noise-reduction system using Verilog-based FPGA, achieving high sound fidelity and error correction.

Precision Circuit Thermometer (UBC, Design Studio) — June 2022
Developed a thermometer using Wheatstone bridge, op-amps, and Arduino, accuracy and optimized performance.

FPGA RISC Machine Processor (UBC, Microcomputers) — December 2021
Developed and synthesized a Turing complete RISC processor in Verilog on Intel's De1-SoC board.