#### **Daniel Klevak**

LinkedIn: <a href="www.linkedin.com/in/daniel-klevak-b75383181">www.linkedin.com/in/daniel-klevak-b75383181</a> | (201)421-8303 | <a href="mailto:klevak.d@northeastern.edu">klevak.d@northeastern.edu</a> EDUCATION

Northeastern University - College of Engineering

Expected Graduation: May 2025

**BS** degree in Computer Engineering

GPA: 3.534(Deans List)

**MS** degree in Cyber-Physical Systems

Expected Graduation: May 2026

Boston, MA

Relevant Coursework: Digital Design, Embedded Design, Circuits and Signals, Computer Architecture,

Fundamentals of IOT, Concepts of Object Oriented Design, Database Design, Electronics

**TECHNICAL SKILLS** 

Computer Languages: C++, C#, Python, Java, R, RISC-V Assembly, SystemVerilog, SQL

Hardware: Microcontrollers, Oscilloscope, Circuit Design and Testing, Raspberry Pi

Applications: Visual Studio, PSpice, Quartus, Arduino, MATLAB, SolidWorks, AutoCAD, Xilinx Vivado

**Operating Systems:** Linux, Windows

**WORK EXPERIENCE:** 

Stemwave, Woburn, MA

January 2024-June 2024

## Computer Engineering and R&D Co-op

- Researched and tested solutions for measuring force output from high-voltage sparks through a liquid and silicone membrane.
- Prototyped and designed a diagnostic tool using Arduino and Raspberry Pi, saving \$3,000/month by improving ESWT device verification.
- Diagnosed and repaired high and low-voltage hardware issues and software malfunctions. (Oscilloscope, Multimeter, Soldering)
- Designed quality assurance protocols and conducted them on over \$6,000,000 worth of inventory.
- Reverse-engineered software from the device manufacturer to identify and fix issues and add additional functionality such as data tracking. (Raspberry Pi, Python, Linux)
- Implemented solutions to streamline operations and create visualizations and insights. (Python, APIs)

# Sparx Hockey, Acton, MA

January 2023-June 2023

## **Electrical and Computer Engineering Co-Op**

- Created prototypes using Arduino, incorporating electrical systems with LEDs, buttons, and sensors.
- Developed internal tools in C# for efficient data visualization and information display.
- Designed data analysis protocols in R for automated analysis and visualization of material test data.
- Utilized computer vision technologies, including laser measurement systems and Cognex Insight camera.

### ACADEMIC PROJECTS

## Blind Aid System(Capstone Project)

July 2024- December 2024

- Utilizing computer vision, computer stereo vision, and ultrasonic distance sensing to visualize and describe surroundings for the blind as well as alert them of any hazards.
- Connecting a system of sensor enabled shoes and glasses with Bluetooth to allow for feedback to the user using speakers and haptic feedback.

### **EKG Machine(Circuits and Signals)**

January 2022-May 2022

 Constructed a circuit that utilized instrumentation amplifiers as well as an operational amplifier and used digital to analog conversion to see human heart beat signals in MATLAB

#### Robotic Arm(Embedded Design: Enabling Robotics)

October 2022-December 2022

• Programmed a robotic arm capable of remote-control movement and automatic movement between saved positions using Quartus and an FPGA.

#### **EXTRACURRICULARS AND INTERESTS**

### Northeastern TV Director of Entertainment:

- •Organized and lead weekly meetings for the club's entertainment department as well as club-wide events.
- •Collaborated with the executive board to create a fun and inclusive environment for 150+ active members.

#### **NUSEDS:**

•Ideate and develop system oriented solutions to NASA's Lunabotics challenge.

Interests: Reading, Chess, Video Production, Hiking, History, Civilization VI, Space Exploration, Philosophy

**Languages**: Russian (Fluent)