Daniel Khataiepour

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EDUCATION

University of Waterloo   Waterloo, ON
Bachelor of Applied Science (B.A.Sc.) in Electrical Engineering   *Sept 2023 – Present*

EXPERIENCE

Freelance Full-Stack Developer   Aug 2024 – Present
Self-Employed   *Remote*
- **Built 5 full-stack websites** with **ReactJS, HTML, CSS**, using back-end logic to improve **UX** and **efficiency**.
- **Optimized UI/UX design**, ensuring **100% responsiveness** across desktops, tablets, and mobile screens.
- **Boosted client website traffic by 30%**, implementing SEO strategies for improved search visibility.
- **Earned $1000+ in revenue**, expanding a network through **referrals and university connections**.

Cyber Risk Management Administrator   Jan 2024 – Apr 2024
Toronto District School Board   *Toronto, ON*
- **Led 100+ cyber risk assessments**, reducing **security vulnerabilities by 50%** in cloud and online services.
- **Conducted penetration testing**, mitigating **95% of critical vulnerabilities** across TDSB systems.
- **Resolved 10+ system vulnerabilities**, preventing **data breaches** and strengthening security measures.

Waterloo Experience Accelerate Program CO-OP   Jan 2023 – Apr 2023
University of Waterloo/Microsoft   *Waterloo, ON*
- **Led a team of 6** to develop a **medical software project**, achieving **100% on-time delivery**.
- **Earned Microsoft AZ-900 & AI-900 certifications**, showcasing **cloud computing and AI fundamentals**.
- **Developed an AI-driven solution** with interdisciplinary teams, enhancing performance via **data analysis**.

PROJECTS

Li-Po Battery Circuit Charger PCB | *KiCad, Power Electronics, PCB Layout*   **GitHub Link**
- **Designed and fabricated** a **Li-Po battery charger PCB** in KiCad, achieving **99.9% charging efficiency**.
- **Integrated MCP73831** for precise charge control, increasing **battery lifespan by 30%**.
- **Conducted load testing & power analysis**, ensuring $\pm 1\%$ **voltage accuracy** across varying loads.

5V Voltage Regulator PCB | *KiCad, Power Stability, Circuit Design*   **GitHub Link**
- **Developed a linear voltage regulator PCB** with **LM317**, maintaining **<1% output fluctuation**.
- **Optimized capacitor filtering & heat dissipation**, reducing **ripple voltage by 85%**.
- **Simulated and validated load regulation**, achieving **99.5% voltage stability** under varying conditions.

Hand Tracker Computer Vision | *Python, OpenCV, Real-Time Processing*   **Video**
- **Engineered a real-time AI hand tracker** with **OpenCV**, achieving **98.5% gesture recognition accuracy**.
- **Optimized a CNN model**, reducing **latency by 40%** for smoother interaction.
- **Implemented Python landmark tracking**, achieving **>95% recognition accuracy** across diverse poses.

TECHNICAL SKILLS

Software & Programming Languages: C, C++, C#, Python, Java, JavaScript, HTML, CSS, MATLAB, VHDL.
EDA & CAD Tools: Altium Designer, KiCad, EasyEDA, LTSpice, AutoCAD, SolidWorks, OnShape.
Microcontroller & Embedded Development: STM32 IDE, ESP32, Raspberry Pi, BetaFlight, Arduino IDE.
Hardware & Testing Equipment: PCB Assembly, Soldering, Oscilloscope, Digital Multimeter, HV Power Supply.
Communication Protocols: I2C, SPI, isoSPI, USB, UART, CAN, RS-232/485.
Software & Frameworks: Git, OpenCV, NumPy, ReactJS, Figma, Google Analytics, Google Colab, Microsoft Excel.