SHAYAN KHALKHALI

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GitHub (https://github.com/shakhal350)

SUMMARY OF SKILLS AND QUALIFICATIONS

Operating Systems:	Windows 10/11 • Linux
Applications:	MS Office suite (Word, Excel, PPT) • Eclipse • IntelliJ • VSCode • Arduino • PyCharm
Engineering Tools:	AutoCAD (Electrical) • Xilinx Vivado • ModelSim • PlanAhead Design Tool
Programming Languages:	C • C++ • Java • Python • JavaScript • MATLAB • Assembly • VHDL
Development Platforms:	Firebase • Web platform (React.js)
Methodologies:	Agile & Scrum • Project Management • Kanban • GitHub • Git
Languages:	English & French: Excellent oral and written communication skills • Farsi: Fluent (spoken)
Licenses & Certifications:	ASP Certification (Construction Safety) • Valid Class 5 Driving Permit

EDUCATION

Bachelor of Engineering - Electrical Engineering

May 2024

Concordia University, Montreal, QC

Electrical Engineering – <u>Concordia University</u>

• Electives: Operating Systems, Industrial Power Systems, Medical Image Processing

WORK EXPERIENCE

Electrician Assistant 2019 – 2023 (Summers)

H. PASHA ÉLECTRIQUE INC., Saint-Jacques West, QC

- Led a team of 5 during the 3-month relocation of business operations.
- Assisted senior electricians with testing, maintenance, and storage of over 50 medium-sized transformers.
- Measured, cut and sold various types of cables and wires, while ensuring accuracy and customer satisfaction.
- Installed LED lighting in a 6,400 ft² shop and storage facility, applying principles of electrical system design and installation.
- Contributed to building and wiring the front desk and installing 120V outlets at a new store, enhancing its sales operations.
- Organized and catalogued electronic devices in Excel, including wires, breakers, panels, fuses, and more.
- · Operated company vehicles, forklifts, pallet jacks, and scissor lifts for efficient procurement and storage of goods.
- Delivery and pickup of merchandise across Montreal.
- Utilized a range of tools such as drills, wire cutters, saws, and motor-driven reels.
- Participated in the disassembling and reinstalling of pallet racks in a 12,800 ft² shop, improving workspace functionality.

Core Competencies: Working under Pressure, Leadership, Adaptability, Organization, Team Management, Time-management, Inventory Management, Equipment Operation, Electrical Knowledge, Logistics, Safety

PROJECTS

Radar System for Indoor Health Monitoring (Capstone Project) - Link

2023 – 2024

Concordia University, Montreal, QC

- Played a pivotal role in the development of an innovative radar-based system designed to monitor human vital signs indoors, leveraging Frequency Modulated Continuous Wave (FMCW) mmWave radar technology, programmed using Python and MATLAB.
- Led the design and development of signal processing algorithms and noise reduction techniques, enhancing the accuracy of vital sign detection.
- Engaged in comprehensive research, including studying academic papers and technical materials, to integrate advanced signal processing into the project.

Core Competencies: Technical Research, Signal Processing, Radar Technology, Machine Learning, Software Development, User Interface Design, Ethical Analysis, Team Collaboration.

$\textbf{App Development} \ (\textbf{Seat Utilization Tracking App}) - \underline{\textbf{Link}}$

2022

2022

Concordia University, Montreal, QC

- · Designed a user-friendly and intuitive Android app UI for easy seat tracking and visualization using Android Studio and Java.
- Integrated Firebase Realtime Database to store and synchronize seat occupancy data across multiple devices.
- Utilized Arduino microcontrollers for interfacing with seat occupancy sensors and wireless communication modules, programming in C/C++.
- Optimized database queries and data structures to ensure efficient storage and retrieval of seat occupancy information.
- Documented project requirements, architecture, and user guides to ensure effective knowledge transfer and maintainability.

Core Competencies: Leadership, Adaptability, UI/UX Design, Database Management, Hardware Integration, System Optimization, Technical Documentation, Team Management, Time Management.

Web Development (Online Shopping Platform Website) - Link

Concordia University, Montreal, QC

- Collaborated with 4 team members to design and develop a shopping website using Javascript and React.js.
- Contributed to the development of a payment page for the website.
- Documented all meeting minutes and maintained project records using Markdown and Git.
- Managed the GitHub Wiki page to ensure effective communication and collaboration within the team.

Core Competencies: Team Collaboration, Project Documentation, Version Control, Communication, Leadership, Adaptability, Organization, Time Management.

INTERESTS

Computer Building Sports Building desktop computers from individual components.

Passions

Exploring different parts of Montreal, including Lachine Canal and Mont Royal, on my bike. Golfing at the free range Passionate about disassembling and understanding the inner workings of devices such as laptops and smartphones.