Param Singh

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SKILLS

Programming Languages: Java, Python, C, C#, JavaScript/TypeScript, HTML, CSS, R, MATLAB, Assembly Frameworks and Databases: MySQL, React, MariaDB, Selenium, .NET, JUnit, Jest, Pitest, Mockito Tools: AutoCAD, Power Apps, Git, NodeJS, VS/Code, Jira, Bash, Excel, LaTeX, Powershell, Google Cloud, PowerBI

EDUCATION

University of Victoria

Sep 2022 - Dec 2026

Bachelor of Software Engineering, Software Engineering specializing in Machine Learning

Victoria, BC

• Relevant Courses: DSA I & II, Operating Systems, Database Systems, Computer Networks

WORK EXPERIENCE

Distribution Design Engineer | AutoCAD, Power Apps, C#, .NET, TypeScript ATCO Electric

Sep 2024 – Aug 2025

Edmonton, AB

- Drafting power application proposals and developing **AutoCAD** designs for projects involving transformer capacity upgrades, as well as transitioning power lines from single-phase to three-phase configurations for both underground and overhead applications.
- Collaborating with cross-functional teams, while maintaining communication with clients to address their requested needs based on **operating load** (kW) and **service entrance** (A) requirements.
- Implemented **regular expression** for a Contracting App to identify organization emails and newer features for stakeholders while maintaining correct error handling practices
- Developed an application using **Power Apps** to track report submissions of field experience and technical report hours, Improved flow efficiency by 40% (8 hours) and **automated** an efficient refresh system
- Designed and implemented a .NET <u>application</u> in C# utilizing the SOAP API to extract billing usage data and generate a detailed billing summary <u>using TypeScript</u>, organized by teams, in Excel
- Drafted complex, non-standard designs in AutoCAD tailored to regional and customer-specific requirements.

VOLUNTEER EXPERIENCE

Undergraduate Research Assistant (NDA) | Python, Linux SOLIDS Lab

Jan 2024 – Apr 2024

 $Victoria,\ BC$

- Researched quantum-resistant cryptographic protocols and their impact on RSA and ECC encryption.
- Evaluated TCP/IP and UDP protocols for underwater communication, finding UDP reduces latency by up to 30% compared to TCP in noisy conditions.
- Assisted with threat modeling and instruction detection using Machine Learning Models in Python.

Software Developer | Unity, C#, VR

Aug 2023 – Nov 2023

Dream EliXR

Victoria, BC

- Showcased skills with a **demo of a small-sized** local network one-on-one First-Person Shooter Game.
- Created and optimized game scenes using C# and Unity, meeting all milestones ahead of schedule.
- Collaborated with a team of six to plan the development of a horror escape room VR game set for release in 2026.
- Achieved proficiency in C# and Unity within one month, demonstrating rapid learning and adaptability.

PROJECTS

SportMatch | MySQL, Python, React, Axios, Sequelize, Jest, Git

May 2024 – Aug 2024

- Designed and implemented the backend using MySQL, including creating multiple ERD diagrams to ensure efficient and secure database design.
- Developed a **Python** script to generate a CSV file of **5,000** entries, to simulate user activity for testing purposes.
- Developed a full-stack **React** & **Sequelize** ORM application handling 5,000+ simulated user transactions while achieving 90% **Jest** test coverage, ensuring robust API & database reliability.

ServerManager Discord Bot | Javascript, NodeJS, DiscordJS, Git

July 2023

- Developed a Discord bot using **DiscordJS**, deployed and managed with **NodeJS**.
- Designed and implemented server management features, enabling users to efficiently manage their server roles.
- Integrated the OpenAI API, utilizing the davinci-003 model to provide AI-driven capabilities, such as responding to user queries or generating text.