Sparsh Trivedy

Year 3 Computer Science Major at UBC

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Work Experience

Teaching Assistant (CPSC 330 - Applied Machine Learning)

Sep 2023 – present

UBC Department of Computer Science

Vancouver, BC

Skills: supervised and unsupervised ML, feature extraction and engineering, communicating results

Web Developer Work Learn

May 2023 – Aug 2023

Vancouver, BC

UBC Faculty of Forestry

Skills: Python, Django, JavaScript, HTML, CSS

- Designed and implemented student dashboard for TA portal, showcasing application analytics through visual aids for enhanced data visualization and comprehension.
- Implemented feature enabling students to upload multiple training certificates, enhancing the application review process.
- Initiated a **comprehensive overhaul** of the student and instructor **interfaces**, upholding **UI/UX principles** to create an **intuitive user experience**.

Full stack Web Developer Co-op

Sep 2022 – Apr 2023

Vancouver, BC

BGC Engineering

Skills: TypeScript, React.js, C#, .NET, and MS SQL Server

- Developed data table to store and organize instrumentation data, enhancing data accessibility.
- Devised **modal pop-up** allowing users to **transfer data** from existing inspections into new inspections, **saving time** spent on **repetitive data entry**.
- Implemented **nested repeating sections** for landslide inspection forms, allowing users to **manage hazards** and **associated mitigations** efficiently.
- Incorporated **tagging capabilities** for **attachments**, facilitating **categorization** and **organization**.

TECHNICAL PROJECTS

PlayBook

Jul 2023 – Aug 2023

Skills: Express.js, Node.js, React.js, PostgreSQL, AWS - RDS, EC2, Nginx

playbookmanager.xyz

- Created **cloud hosted** sports management application on **AWS EC2**, utilizing **RDS** for **data storage** and **Nginx** as a **reverse proxy**.
- Optimized DB structure considering weak entities, ISA relationships, and constraints, minimizing data redundancy through BCNF normalization.
- Implemented role-based admin and team manager views with controlled access.
- Ensured user data security through JWT web token-based authentication and authorization.

Get-it-together

Mar 2023 – Apr 2023

Skills: Express.js, Node.js, React.js, MongoDB - NoSQL DB get-it-together-

- get-it-together-wlk9.onrender.com
- Created **task tracking application**, enabling **logged-in users** to perform Create, Read, Update, and Delete (**CRUD REST-API endpoints**) operations on tasks.
- Implemented authentication and authorization functionalities using JWT tokens and bcrypt for secure password hashing, ensuring user data privacy.
- Implemented robust error handling mechanisms to enhance application stability and user experience.

EDUCATION

University of British Columbia

Computer Science Major - Year 3

Sep 2020 - Aug 2025

Vancouver, BC

• CS+Math+Stat Avg: 85.9%

• Cumulative Avg: 84.4%

• Outstanding International Student Award

Volunteer Experience

Academic Experience Coordinator

Jul 2022 - present

- Collaborate with a team of coordinators to **enhance the academic experience** of UBC students.
- Organize surveys and events to guide them towards appropriate resources and facilitate exploration of diverse opportunities.

Software Team Member

Sep 2022 - Feb 2023

• Utilized ROS QT and C++ to develop GUI for rover, displaying various metrics.

TECHNICAL SKILLS

Front-end: HTML, CSS, React.js, Redux, Axios

Back-end: Node.js, Express.js, .NET, Django

Database Management: SQL, PostgreSQL, SQLite, MS SQL Server, MongoDB (NoSQL)

Cloud: AWS - Lambda, API Gateway, Cognito, IAM, DynamoDB, RDS, EC2, WAF

Machine Learning: Python, Pandas, Numpy, Scikit-learn

Languages: JavaScript, TypeScript, Python, Java, C++, C, C#

Tools: Postman, pgAdmin, Git, GitHub, CI/CD, Docker, UML, Nginx