Surya Uday Singh

Toronto, Ontario

Technical Skills

Languages: Java, C++, HTML, HTML5, CSS, CSS3, JavaScript, SQL, ES6, PHP, Python, Jquery, EJS

Technologies: GitHub, React, Node.js, Git, Frontend, Backend, NoSQL, MongoDB, Excel, Word, Office, REST, JSON,

API, Cloud, VS Code, Eclipse, Azure, AWS, Neural Networks Architechtures

Certifications: Azure Fundamentals Az-900

Experience

Technology Operations Student

Jan 2024 - April 2024

OLG (Ontario's Gaming and Lottery Corporation)

Toronto, Ontario

- Troubleshot Microsoft Teams Rooms and maintained detailed documentation for IT staff.
- Automated administrative tasks using PowerShell to improve device management and policy compliance.
- Supported digital signage updates by managing and deploying office display content.

Teaching Assistant

September 2024 – Present

Algoma University Brampton, Ontario

- Provided one-on-one support to students across multiple courses includeing Computer Applications, Database Design, and Artificial Intelligence, addressing their questions and clarifying complex concepts
- Graded assignments and projects for various classes, ensuring timely and constructive feedback

Projects

Convolutional Neural Network From Scratch | Python | Demo Link

May 2025

- Built a Convolutional Neural Network (CNN) from scratch in Python using NumPy without external ML libraries.
- Implemented custom 2D/3D convolution, ReLU, MaxPooling, and Softmax layers with manual forward and backpropagation.
- Achieved approx **90 percent accuracy** on the MNIST dataset while managing custom gradient calculations and weight updates.

Dream Build | React, Node, API | Demo Link

June 2023

- Developed a fitness website using **React** and **node.js** to help peers find the exercises they need to be healthier.
- Used multiple API's offered by Rapid API to display 100s of exercises and recommending the user videos relating to it.
- Implemented some DevOps principles like CI/CD by hosting the website on netlify offering a seamless development environment

PremierLeagueAPI | SpringBoot, PostgreSQL, Java | Demo Link

January 2025

- Developed a **RESTful API using Spring Boot** for managing Premier League player data, **implementing CRUD** operations
- Using a **PostgreSQL** database, The API interacts with the database to manage data related to Premier League players. Using PostgreSQL's robust features and reliability, the application ensures efficient data storage and retrieval of player information.

Education

Algoma University

2022 - 2026

Bachelor of Computer Science Honors

Sault St. Marie, Ontario

Recipient of Chancellors Award (Highest university scholarship)

Relevant Coursework

- Data Structures
- Microsoft Office Suite
- Computer Architecture
- Artificial Intelligence

OOP

- Database Management
- Assembly Programming
- Linear Algebra

Leadership / Extracurricular

Google Developers Student Club

2022

Communications Associate and member

Algoma University

- Organized various workshops for Algoma University students including workshops on Tensorflow, APIs, React and Flutter.
- Led a club of 20+ students in learning new technologies and acquiring skills they required to level up as a learner