

Jaedon Visva

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EDUCATION

Bachelor of Applied Science in Management Engineering

University of Waterloo, 3.93 GPA

Waterloo, ON

2024-2029

TECHNICAL SKILLS

Programming Languages: Python, JavaScript, TypeScript, SQL

Frameworks & Libraries: Flask, React, Next.js, Django, Bootstrap, Pandas, NumPy, OpenCV, Matplotlib

Database: MongoDB, PostgreSQL

DevOps & Tools: Git, Docker, Kubernetes, HTML, CSS, Figma, Jupyter

Other Skills: SAP Crystal Reports, Bluebeam, Agile Development, Data Analysis, Power BI, Cloud Development

EXPERIENCE

Software Developer

June 2024 – August 2024

Ammu IT Consulting

Toronto, ON

- Built RESTful APIs to connect Gong and CRM systems, improving client data sync speed by 10%.
- Developed a Flask API to retrieve and serve data from an MS SQL Server database, optimizing data access.
- Wrote complex SQL queries, reducing manual data reconciliation time by 12 hours/month.
- Customized SAP Crystal Reports to meet specific customer requirements to ensure customer satisfaction.

Engineering Projects Analyst Intern

March 2023 – June 2023

EllisDon

Mississauga, ON

- Conducted 20+ detailed quantity takeoffs and cost estimates for large infrastructure projects.
- Collaborated with multidisciplinary teams to estimate costs for intersection control systems and subway tunneling.
- Analyzed project specifications to prepare detailed reports for budget allocation and project planning.

Robotics Instructor

January 2024 – May 2024

Holland Bloorview Kids Rehabilitation Hospital

Toronto, ON

- Delivered engaging STEAM lessons, teaching 15+ youth with disabilities robotics and problem-solving skills.
- Led robotics challenges that encouraged creativity, reasoning, and teamwork.
- Adapted lesson plans to accommodate diverse learning needs, ensuring an accessible experience for all students.

PROJECTS

Smart City Traffic Optimization | *Python, Pandas, KNN Clustering, XGBoost, Plotly, Streamlit*

- Analyzed Toronto intersection traffic dataset using Pandas to identify congestion patterns.
- Applied XGBoost to predict bus delays and KNN clustering to extrapolate congestion data across all of Toronto.
- Created visualizations using Plotly and hosted interactive dashboards with Streamlit to present findings to judges.
- Placed 2nd overall in the university category.

NeuroBlocks | *Python, JavaScript, Flask, BrainFlow API, Google Blockly API*

- Developed a drag-and-drop interface enabling users to prototype EEG-based BCI apps in under 5 minutes.
- Integrated the BrainFlow API to preprocess real-time EEG data (signal filtering, artifact removal) and used a Flask backend for real-time EEG data processing (latency <100ms).
- Improved accessibility by reducing the learning curve for non-programmers, validated via 10+ user tests.

Visa Fraud | *Pandas, NumPy, Scikit-learn, Graphviz, Git*

- Developed and evaluated machine learning models (KNN, Linear Regression, Decision Trees, Random Forests) using Scikit-learn, optimizing accuracy and interpretability metrics.
- Preprocessed and analyzed datasets with Pandas and NumPy, handling feature selection, data cleaning, transformation, and train-test splits for evaluation.
- Optimized hyperparameters and visualized decision-making with Graphviz to enhance model interpretability.

Mesh AI | *Cohere API, Flask, React, Next.js, Typescript, Python, MongoDB*

- Developed a machine learning powered platform to allow users to connect with project members, freelancers, etc.
- Implemented semantic search using Cohere's ReRank model to match users based on natural language queries.
- Built a resume parsing pipeline using Cohere generative models to extract and analyze keywords from user-submitted resumes, ensuring compatibility with the semantic search feature.
- Utilized RESTful APIs to enable real-time data exchange and MongoDB for profile and resume data management.