Ivan Bardziyan

Education

Queen's University

Bachelor's of Computer Engineering

Expected Graduation: May 2027

Kingston, ON

• Courses: Discrete Math, Intro. to Data Science, Digital Systems, Computer Architecture, Object Oriented Programming, Data Structures and Algorithms, Electronics and Electromagnetism

Work Experience

M2M Tech Bytes Mar 2025 – Present

Machine Learning & Data Science Intern

Kingston, ON

- Performed background research on existing products, services, and datasets to identify AI/ML applications to meet client's needs
- Performed processing on datasets utilizing Python Pandas to improve data accuracy by over 30% and provide consistent results to clients
- Leveraged the Google Cloud Platform (GCP) to deploy scalable ML models and data analytics pipelines, including utilizing Vertex AI and Vision AI

Smart Vehicle Kill-Switch Project

Sep 2024 - Dec 2024

Course Project, Team Member

Kingston, ON

- Engineered a smart vehicle kill-switch using **embedded controllers**, programming safety triggers in **C** and **Arduino** with GPS, fingerprint, and magnetic switch sensors, achieving 100% fault detection
- Integrated microcontrollers, sensors, and relays, utilizing oscilloscopes and debugging tools to enhance vehicle safety through a web app built with Node.js, Twilio, and Google Maps API

Software Developer

Kingston, ON

- Engineered a Recurrent Neural Network (RNN) using Tensorflow and Keras to analyze multi-sensor data post-trick, delivering actionable feedback that improved snowboard trick success rates by over 50%
- Identified and resolved integration issues in the 4 piezoelectric sensors using debugging tools, improving data accuracy by 36% and ensuring consistent model performance
- Improved RNN model accuracy by 15% through hyperparameter tuning and integrated the model into a
 Django-based web app, delivering snowboard trick feedback via a dynamic user interface

Projects

To-Do App | Source Code

Python | Django

- Developed a to-do list web application using **Django**, implementing robust backend logic for task creation, updating, and deletion
- Implemented user authentication and authorization using **Django's built-in authentication system**, allowing secure and personalized task management

C Social Media Recreation | Source Code

 \mathbf{C}

• Developed a scalable social media platform similar to Twitter/X using C, supporting 10,000+ users with features like user management, messaging, and dynamic feed updates

Leadership

ESSDEV - Project Manager

Oct 2024 - Present

- Leading a team of 5 developers to build a full-stack student marketplace application using React for the front-end, Django for the back-end, and Firebase for real-time data management and authentication
- Managing project timelines, delegating tasks, and driving Agile development practices, resulting in a 30% increase in development efficiency and ensuring on-time feature delivery

Technical Skills

Languages: Python, Java, SQL, C, VHDL, Arduino, Assembly

Tools: AWS, GCP, Git, Power BI, VS Code, Figma, Solidworks & FEA

Libraries/Frameworks: ReactJS, mySQL, Django, Tensorflow, Keras, Scikit-learn