Vaibhav (Vai) Patankar

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Relevant Links: **LinkedIn** | **GitHub**
Programming Languages: C++, C#, Java, Python, HTML, CSS, XML, SQL, Ruby
Frameworks: .NET MAUI, SDL 2.0, Processing**,** Pygame, NodeJS, React, Open-GL
Technologies: Git, Unity3D, VSCode, Visual Studio

EDUCATION

Conestoga High School - Senior   **August 2021 - June 2025**

Relevant Coursework: AP Computer Science A (Java), App Development 1 & 2 (C#), AP Statistics, AP Computer Science Principles (Python), AP Physics C: Mechanics, Electricity and Magnetism, AP Calculus

PROJECTS

Map App| Github Code | C#, .NET, MAUI, XAML, XML   **2024**
- Built a lip-reading algorithm from scratch for helping the deaf by using deep learning and computer vision
- Designed a script to collect ~700 individual videos of people speaking words, roughly amounting to 3GB of training data
- Used 3D-CNNs to classify frame sequences into words and achieved a training and testing accuracy of 97.4% and 99.2%
- Final model has high precision, recall, and F1 score, and is lightweight enough to run and predict in real-time

RPG Game| Demo | C++, SDL 2.0   **2023**
- Training LSTMs on historic intraday data at 1 minute intervals to create an automated stock bot

Unity Projects | Github Code | C#   **2024**
- Using React and PostgreSQL to develop full-stack application for market simulations and bot trading visualizations

Evil Hangman | Github Code | C#   **2023**
- Using React and PostgreSQL to develop full-stack application for market simulations and bot trading visualizations

AP CSA Projects | Github Code | JAVA, Processing   **2022**

EXPERIENCE

Robotics Team Lead Programmer   **September 2022 - Present**
Vex Robotics 6121A - Worlds Division Semifinalist

Honors and Awards
- **USACO Gold(C++)**
- **1X AIME Qualifier**
- **AP Scholar**