# Vikram Patil

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#### **EDUCATION**

### University of Massachusetts, Amherst Fall 2019 – May 2023

- B.Sc. Computer Science Exp. May 2023. GPA: 3.8
- Undergraduate Coursework: Databases; Algorithms; Programming Languages JS, Java, C; Comp. Architecture; Database Management; Mobile Health sensing and Analytics; Calculus; Statistics.

EXPERIENCE		
Software Development Intern	Advaint	Summer 2021

- Advaint is a startup building Computer Vision ML based IOT product in safety, security, and comfort residential market in India.
- My role, in a team of 3, was train ML models for identifying a child in a surveillance video stream.
- Model is used by the IOT platform to identify unaccompanied children in prohibited areas e.g., near swimming pool, electricity distribution areas etc. using Roboflow and made other models like memberguest detection etc with OpenCV, and TensorFlow.

#### **TECHNICAL EXPERIENCE**

### **Projects**

- **Shopping Bot** (2021). Generated multifunctional Shopping Bot that can auto-buy to buy a product from a shopping website in seconds. The bot was implemented using Python and Selenium and buy products which are in high demand at best prices.
- Emotion Analysis through Voice (Python, Numpy, MatplotLib)(2021). Detected and analysed emotions in the voice using features like Intensity, MFCC, Peaks, Power Spectrum etc. Trained the data using N-fold cross validation and confusion matrix.
- Image Processing Library (JavaScript) (2021). Created a JavaScript Image Processing Library that works by manipulating individual pixel's RGB values. Implemented 10 different functionalities such as Blur, Pixelate, and Saturation etc.
- Game Board (Python) (2021). Created a connect 4 AI bot using the AI technique of minmax using the alpha beta pruning algorithm to recursively traverse the game tree and find value of states.

#### ADDITIONAL EXPERIENCE AND AWARDS

- **Peer Mentor(Present)**: Mentored Students by helping them with any guidance they required and advising them on courses to take based on their interests.
- Dean's List (2019, 2020): Awarded for academic excellence in coursework.

## Languages and Technologies

Javascript (advanced); HTML5/CSS (intermediate); Java (advanced); C++ (intermediate); Node.js
PSQL (intermediate); Adobe XD(advanced), React(intermediate), TensorFlow(intermediate);