# Vedant Patel

 $530\text{-}204\text{-}8133 \mid vsxpatel@ucdavis.edu \mid linkedin.com/in/Vedant1033 \mid github.com/Programmer7129 \mid \underline{Portfolio~Website} \mid vsxpatel@ucdavis.edu \mid vsxpatel@ucdav$ 

#### EDUCATION

# University of California Davis

Expected Jun 2025

Bachelor of Science (B.S.) in Computer Science, Minor in Technology Management

Davis, CA

• Data Structures & Algorithms, Circuits, Computer Organization & Programming, Combinatorics, Machine Learning, Artificial Intelligence, Object-Oriented Programming, Statistics, Embedded Systems

#### Experience

### Software Engineering Intern

Oct 2024 - Present

Drevol

Seattle (Hybrid), CA

- Developed and deployed AI-powered solutions to enhance operational workflows, leveraging advanced image recognition and natural language processing (NLP) models to automate user interactions and streamline processes, resulting in a 25% reduction in manual effort.
- Integrated machine learning algorithms into enterprise systems, **optimizing predictive analytics** and delivering actionable insights that improved system accuracy by **30**% and enhanced decision-making efficiency
- Engineered and refined automation solutions utilizing C#, .NET, and SQL for core business processes, driving a 20% boost in task efficiency through effective collaboration with cross-functional, multi-shore teams.

## Machine Learning Research Assistant

Feb 2024 – Present

 $UC\ Davis$ 

Davis, CA

- Engineered efficient low-power algorithms for ECG signal classification, achieving 92.8% accuracy using a TinyML ensemble Random Forest Classifier and significantly enhancing battery life for wearable devices
- Achieved 93.6% predictive accuracy in anomaly detection through advanced feature engineering and strategic hyperparameter tuning with GridSearchCV
- Employed SHAP and LIME techniques to optimize Deep Neural Network and Recurrent Neural Network model for time-series data, resulting in a 7% accuracy boost in constrained device environments

Data Science Intern Oct 2021 – Dec 2021

ArtifIntel Pvt. Ltd.

Bengaluru(Remote), India

- Executed comprehensive data preprocessing and transformation on inconsistent datasets, employed classification and regression techniques for training supervised learning models to achieve an impressive 98% accuracy
- Created detailed visual reports with Matplotlib and Seaborn, enhancing data interpretability and enabling a 25% improvement in strategic planning accuracy across multiple departments

#### LEADERSHIP

### Project Manager

Jan 2024 – Apr 2024

CodeLab

Davis, CA

- $\bullet$  Led the Summarizit project team to develop an innovative web application that analyzes and summarizes extensive video content, resulting in a 40% increase in user productivity and information accessibility
- Engineered scalable web applications with React, Node.js, Express, and MongoDB optimizing CRUD routes to increase data retrieval speed by 40% and enhance overall system performance by 25%

## Technology Director

Sep 2023 – Present

Google Developers Student Club (GDSC)

Davis, CA

• Spearheaded AI/ML projects including a music recommender and medical chatbot, while organizing industry expert lectures, resulting in 35% increase in user engagement and 40% growth in professional network

## PROJECTS

#### InvestIQ AI | NextJS, TailwindCSS, Vercel, LLMs

Jun 2024 – Present

- $\bullet$  Spearheaded the development of an AI-driven personal finance web application, integrating machine learning algorithms to provide predictive financial analysis with 90% accuracy and optimize portfolio performance by up to 15%
- Engineered a full-stack solution featuring an intelligent chatbot with 95% user query resolution rate, and data visualization tools that reduced financial decision-making time by 30%

Scream Detection Deep Neural Network | Python, MLP, Deep Learning, React

Apr 2023 – Apr 2023

Developed and deployed SVM regression and Multi-Layer Perceptron (MLP) models for real-time distress call
detection, achieving an overall accuracy rate of 93% by distinguishing acoustic level differences

## TECHNICAL SKILLS

Languages: Python, C/C++, Java, JavaScript, C#, SQL HTML5/CSS3, R, MATLAB

Frameworks: Next.js, Postgres, PyTorch, Prisma, Vercel, Django, .NET, React, Node.js, Flask, MongoDB, AWS Developer Tools: Git, Docker, CI/CD, Google Cloud Platform, VS Code, PyCharm, Eclipse, TensorFlow, Jupyter