Amit Anantrao Patil

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EDUCATION

California State University, East Bay, Hayward, California

May 2025

Masters of Science in Computer Science (GPA: 4/4)

Relevant Courses: Advanced Algorithms, Web Systems, Cybersecurity, Theory of Computation, Operating Systems Design, Machine Learning, Advance Artificial Intelligence, Database & Management Systems.

TECHNICAL SKILLS

Programming Languages: Python, C++, Java

Databases: MySQL, PostgreSQL, MongoDB, Snowflake(worked on caching and high-performance data retrieval)

Frameworks & Tools: Flask, Django, Node. js, Express. js, Airflow, REST APIs, Streamlit, Tableau

Cloud Technologies: AWS (S3, EC2, Lambda, RDS), Google Cloud (Compute Engine, BigQuery, Cloud Functions) AI & Machine Learning: LLMs, RAG, Vector Databases, Image Processing, Reinforcement Learning, PyTorch, TensorFlow, Prompt Engineering, Fine-Tuning, Backend AI Services.

WORK EXPERIENCE

California State University, East Bay

2024

Student Assistant

- · Built and maintained autonomous Duckiebots using NVIDIA Jetson Nano and ROS for real-time navigation and obstacle detection in Duckietown environments.
- · Documented and streamlined assembly procedures and coding standards for robotics lab, resulting in a 30% reduction in setup time for new systems.

Kipi.ai2023Senior Software EngineerRemote

- · Reduced cloud data warehousing processing time by 40% by implementing optimized data flow pipelines and enhancing storage utilization.
- · Migrated high-volume data from RDS to Snowflake using Airflow, decreasing reporting latency by 20% and allowing for real-time analytics.

Software Engineer 2022 - 2023

- · Spearheaded the development of a Data-Ops pipeline, applying Agile and DevOps practices to reduce deployment failures by 30% and increase delivery speed by 20%.
- · Partnered closely with stakeholders to define project scopes, leading to a 25% reduction in project timeline and a 15% boost in customer satisfaction.

Software Engineer Intern 2022

- · Drove data engineering initiatives, improving data-driven decision-making by 20%.
- · Optimized data storage and analytics with Snowflake, reducing processing time by 15%.

NTT DATA 2021 - 2022

Software Engineer Intern

Remote

· Developed API solutions with MuleSoft, improving integration efficiency by 25% across distributed data sources for various enterprise clients.

PROJECTS

AI Learning Assistant | GitHub | 100+ hours

- · Developed a Zoom-based chatbot that summarizes lecture content, generates quizzes, and offers additional learning resources using Fireworks AI and Qdrant.
- · Implemented seamless integration with Zoom APIs to provide real-time lecture summaries and resource generation, enhancing student engagement.
- · Built an architecture using LlamaIndex for data organization and vector search capabilities with Qdrant for fast and relevant information retrieval.

Notes Sorter | GitHub | 40+ hours

- · Developed an automated tool that detects colored Post-it notes in images and categorizes them in Google Drive using Google Drive API.
- · Scaled application to support multiple color categories and formats, streamlining document organization workflows.

Podcast Scraper and Transcriber | Github | 60+ hours

- · Built a web scraper and transcription service for podcasts, using APIs (Spotify, Apple Podcasts) and integrating Streamlit for front-end interfacing.
- · Developed backend automation to streamline transcription processes and enhance accuracy, resulting in a 20% reduction in manual editing.