

DEV PATEL

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<https://github.com/DevPatel3547>

EDUCATION

Texas A&M University

Aug 2021 – May 2025

Bachelor of Science Computer Science - Honors, Minors in Stats and Mathematics; GPA: 3.5, Dean's Honors Award

Relevant Coursework: Analysis of Algorithms, Data Structures and algorithms, ML, AI, Operating Systems, Computer architecture, Programming Languages, Coursera ML specialization, Udemy data science bootcamp, Udemy mastering DSA; LinkedIn SWE Developer

Campus Involvement: Aggie Competitive Programming Club, Aggie Coding Club, TAMU Cyber Security Club, Google SDC

SKILLS

Languages/ Frameworks: Python, SQL, C#, C/C++, Java, JS/HTML/CSS, React, Node, Django, TypeScript, Docker, Spark, ETL, ORM

Tools/Technologies: My/PSQL, REST APIs, AWS, Kubernetes, .NET, GRPC, Jenkins, Apache, RubyOnRails, ETL, GraphQL, JIRA, Heroku

EXPERIENCE

Software Engineering Intern, Ansys, Austin TX

May 2024 – Dec 2024

- Implementing **.NET, Signal R and C# WebAPIs** for system migrations, utilized **GRPC** for efficient data transfer across microservices.
- Solved bugs across multiple architecture layers and languages (C#, C++, Python, JS, Angular) using dynamic code tracing and memory profiling.
- Crafted **REST/MVC** requests for async tasks on web-responsiveness, **SignalR** for bi-directional sync and **IronPython** for scripting simulations.

Data Research Analyst, Texas A&M University

Nov 2023 – Mar 2023

- Architected and deployed Python-based **ETL workflows to automate** data cleansing, normalization, and integration of multi-source datasets.
- Enhanced disaster management strategies by implementing ML algorithms, focusing on predictive analytics using **Pandas, SciPy, and SQL**.
- Refined data analysis and reporting processes, employing complex SQL queries and data visualization tools for strategic decision-making.

Software Engineering Intern, Sigma Infosolutions

May 2022 – Jul 2022

- Developed an e-commerce transaction **React/Spring Boot** feature, enhancing UI/UX and server interactions for client experience optimization.
- Elevated **PostgreSQL** and **MongoDB** using **Hibernate**, optimizing data transaction and enhancing query performance for financial analytics.
- Drove data flow with **Apache Airflow, Spark; built AWS infra (S3, EC2, RDS);** improved ETL via **Glue;** CI/CD with **Kubernetes + Jenkins**.

Full Stack Developer, Texas A&M University

Aug 2022 – Dec 2022

- Modeled a full-stack web application using **Express.js+Node.js** for server-side processing, integrating **React** for client-side rendering.
- Advanced SQL database management and optimization, ensuring efficient data transactions and responsive user interactions.
- Hosted applications securely on AWS, integrating client requirements with JIRA and Git, and boosted backend performance using Python.

Student Research Assistant, Texas A&M University

May 2022 – Dec 2022

- Piloted predictive models using machine learning algorithms (**Decision Trees, Random Forest**) for advanced malware threat analysis.
- Implemented a React-based analytics dashboard visualizing malware data analyzed with Python libraries and Ghidra reverse engineering,

Software Engineering Intern, 4C Consulting

May 2023 – Jul 2023

- Employed **RESTful APIs** for server-side **data handling and storage solutions in Python and PSQL** databases, focusing on system efficiency.
- Designed responsive web interfaces with HTML, CSS, JavaScript; improved deployment using Jenkins, Agile, Git, JIRA, Postman, GraphQL.

PROJECTS

AI Enhanced Language Learning Platform

Sept 2024 – Present

- Created an AI human tutor app using Python, Django, React, TypeScript, **OpenAI GPT API** for dynamically adaptive lessons.
- Fused live voice interaction using **Whisper API, Asyncio, WebSockets**, enabling interactive lessons with human like open ended conversations.
- Managed data with PostgreSQL, Redis, GraphQL, SQLAlchemy; ensured security via **JWT authentication, HTTPS**, input validation.
- Applied scalable microservices with Docker, Kubernetes; CI/CD pipelines using Jenkins; Logging with **ELK Stack**; ongoing enhancements.

Quant A&M WebApp, <https://github.com/DevPatel3547/QuantA-M>

Jan 2024 – Apr 2024

- Constructed "QuantA-M", a **Ruby on Rails** app, for computing club; **PostgreSQL+Docker** for DB schema and **TDD** using RSPEC and reviews.
- Implemented CI/CD pipelines with **GitHub Actions** and **Heroku**, managed project workflows using Jira in alignment with Agile methodologies.

Customer POS System, <https://github.com/DevPatel3547/CustomerPOSSystem>

Aug 2023 – Dec 2023

- Launched a React.js app with Redux; Node.js backend; REST API using async-await, axios, Postman; PSQL ORM, GMAP APIs; Docker, cloud.

Algorithmic Trading Model, <https://github.com/DevPatel3547/AlgorithmicTradingModel>

May 2023 – Aug 2023

- Devised **LSTM** model in **TensorFlow/Keras** with Yahoo Finance API, using regression, mean reversion for analysis; Backtested on historical data