

PRANAV PUJAR

682-306-2401 | pranavpujar@gmail.com | [linkedin.com/in/pranavpujar](https://www.linkedin.com/in/pranavpujar) | github.com/PranavPujar

EDUCATION

University of Texas at Arlington – *Master of Science in Computer Science (GPA 4.0)* **Aug 2025 – Aug 2026**

University of Texas at Arlington – *Bachelor of Science in Computer Science (GPA 3.78)* **Aug 2021 – Dec 2024**

SKILLS & CERTIFICATES

Languages: Python, Java, C/C++, Go, Scala, SQL, JavaScript

APIs & Web Development: Spring Boot, FastAPI, Flask, React.js, Svelte, Celery, REST APIs

DevOps & Tools: Git, Docker, Kubernetes, Nginx, Kafka, Shell, Hadoop, CI/CD, PyTorch, TensorFlow

Certificates: Microsoft Azure Certified Fundamentals (AZ-900), Applied Data Science, Visualization & ML in Python

EXPERIENCE

Adobe

Aug 2026 (expected)

Incoming Software Engineer

San Jose, California

- Incoming Software Engineer (level P20) in the Digital Experience (DX) organization at Adobe

Innovative Data Intelligence & Research (IDIR) Lab

Aug 2025 - Present

Graduate Research Assistant

Arlington, Texas

- Working on an NSF-funded project to mitigate home damage due to hurricanes. Created the **website** [↗](#) for the same.
- Developed a Graph Neural Network to rank genes by likelihood of influencing plant traits in GeneSieve.
- Designed the model architecture and data pipeline in PyTorch, using DistillBERT for trait embeddings and ESM-2 for gene embeddings.

Adobe

May 2025 – Aug 2025

Software Engineering Intern

San Jose, California

- Built an AI-powered tool for proactive AEP monitoring, preventing journey failures for clients, saving \$100k+ daily
- Built APIs to visualize lineage between different AEP Entities & deployed these APIs into production using Jenkins.
- Engineered a data pipeline integrating lineage data into the Proactive AEP Monitoring tool using Java Spring Boot, empowering customers to analyze and anticipate the financial impact of potential journey failures.

Advanced Micro Devices (AMD)

Jan 2025 – May 2025

Software Engineering Intern

Austin, Texas

- Enhanced an internal automation tool with real-time workflow tracking via Kafka and FastAPI, automated environment setup, and optimized log filtering – improving UX, runtime efficiency, and adoption by 140 users across 20 teams.
- Cut runtime of register control scripts from 54s to 2s by implementing custom batched register reads with Python decorators and leveraging register logic, saving hundreds of employee hours.

Innovative Data Intelligence & Research (IDIR) Lab

June 2024 – Dec 2024

Undergraduate Research Assistant

Arlington, Texas

- Created the backend for **GeneSieve** [↗](#), a gene discovery tool built with Graph Neural Networks, Flask, D3.js & MySQL.
- Executed feature engineering, data preprocessing, and statistical analyses to optimize LLM performance. Fine-tuned hyperparameters and performed model selection to enhance the GeneSieve backend's database query search, improving query-trait matching accuracy by 38%.
- Deployed upgrades to GeneSieve's backend by implementing asyncio/aiohttp for 80% faster API response times, optimized task processing using Celery & Redis, cutting GeneSieve runtime by half.

Emircom

May 2023 – Aug 2023

Intern

Dubai, UAE

- Received training on handling and deploying telecommunications equipment.

UT Arlington - College of Engineering [↗](#)

Sept 2022 – May 2023

Undergraduate Research Assistant


Arlington, Texas

- Assisted in developing a transformer-based classifier for a USDA project on CRISPR-CAS proteins, achieving 96% accuracy.
- Applied feature extraction on over 200,000 CRISPR-CAS protein sequences using Data Science libraries, Shell Scripting and Python tools from GitHub.
- Worked closely with USDA researchers to create & automate ETL pipelines for protein classifier and generative models, cutting data processing time by 33%.


PROJECTS

RateMySpeech  | *Python, React, FastAPI, Whisper, OpenAI, Docker, EKS, CodePipeline, CSS* **October 2023**

- Developed an AI-driven React website that analyzes users' technical interview performance via audio explanations.
- Dockerized frontend and backend and deployed using Kubernetes via AWS EKS.

Syndicate  | *Python, React Native, FastAPI, Boto3, Twilio, Expo, S3, DynamoDB, HTML, CSS* **August 2023**

- Developed a React Native mobile app to democratize real estate investment by matching investors with developers.
- Managed a team of 4 to implement a user preference matching algorithm, integrating AWS S3 buckets for image storage and AWS DynamoDB for noSQL data storage.
- Integrated Twilio SendGrid API for email authentication. Used Expo to accelerate development time by 30%.

iFeaturizer  | *Python, PyQt5, NumPy, Pandas, CSS* **April 2023**

- Spearheaded the development of a full-stack protein feature extractor (for CAS protein classification).
- Designed intelligent data manipulation pipelines using a Python backend to dynamically extract over 13,000 protein features from diverse CSV, TSV, and Excel files, yielding a 30% increase in research work efficiency.

Chemical Structure Generator (CSG)  | *Python, Matplotlib, PyQt5, SQLite3, CSS* **June 2022**

- Built a full-stack application that renders the molecular structure of input chemical compounds within 0.2 sec.
- Validated 100+ input molecular data using Python and SQLite3 backend, integrating CLI functionality for user convenience. Generated and plotted molecular structures using Matplotlib and PyQt5 GUI (with QtDesigner support).