

SHREYAS PRABHAKAR

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Education

Texas Tech University

Graduation: May 2025

Master of Science in Computer Science — Minor Artificial Intelligence

Lubbock, Texas

- Texas Tech Competitive Scholar — GPA: 3.75

Work Experience

Lawrence Berkeley National Laboratory

May 2024 – Aug 2025

Graduate Student Research Assistant

Berkeley, California

- Engineered a **secure account-management module**, including **password reset**, **email verification** and **account-deletion workflows**, while refactoring the data schema to align with the **new micro-services architecture**, boosting account maintenance efficiency by **80%**
- Built a **reusable visualization package** that plots **150+ supercomputer metrics** (CPU/GPU utilization, memory, vmstat, job-level comparisons, etc.) in an **interactive widget**, eliminating the project's dependency on **Grafana** and giving **researchers real-time performance insight** in a **single view**

Texas Tech University Health Sciences Center

April 2024 – Sep 2024

Software Development Intern

Lubbock, Texas

- Collaborated with director to build **CRM for CPM app**, enabling **500+ employees** to **track hours**, **manage leave workflows**, and access delegated **dashboards** using **SignalR**, **EF Core**, **jQuery**, and **SQL**
- Built **real-time WebSocket** notifications and **comment-enabled leave reviews** with minimal lead support, delivering **all features** on time during internship

Terrologic

Oct 2021 – Aug 2023

Software Engineer II

Bengaluru, India

- Developed a **telecommunication web app** for **Fujitsu** using **Angular**, **Leaflet.js**, **Highcharts**, and **Cytoscape**, enabling **real-time management** of **50+ global data centers** through an interactive topology visualization on a world map.
- Designed an **AES encryption mechanism** for secure communication across **5+ applications** in diverse languages, achieving **100% knowledge transfer** and earning **Star Performer of the Year** for a successful client demonstration.

Infosys

Jan 2020 – Oct 2021

System Engineer

Bengaluru, India

- **Architected** a **Job Rotation Portal PoC** for **Infosys** using **PEAN stack** in **14 days**, securing **client approval** and **stakeholder appreciation**, enabling **project acquisition** through effective **team collaboration** and **consensus-building**.
- **Ranked No.3** out of **350 trainees** in **Microsoft Stream Stack training** at **Infosys Mysore**, contributing to **Microsoft Dynamics 365** feature development and achieving **100% client satisfaction** by resolving **weekly customer-reported bugs** and **incidents**.

Projects

BilboMD | [Website](#) | [Source Code](#)

ReactJS | Node JS | MongoDB

- Developed **BilboMD**, a **full-stack web application** using **Python**, **RESTful APIs**, and **ReactJS**, integrating **CHARMM**, **FoXS**, and **MultiFoXS** for **protein 3D structure analysis**, supporting **100+ users** with diverse **MD-based job modes**, **interactive Jiffy tools**, and **email notifications**, processing **500+ jobs** at **NERSC** and **BL12.3.1**.

BraTS PolypSegmentation | [Source Code](#)

Python | Numpy | Tensor Flow

- Developed a modified **DUCKNet architecture** using **Python** and **TensorFlow** for **brain tumor segmentation** on the **BraTS2020 dataset**, achieving a **88.72% Dice Coefficient** on **validation data**, with **optimized preprocessing** and **training** on a **40GB A100 GPU**, enhancing **MRI-based diagnosis**.

Technical Skills

Languages: Python, C#, SQL, HTML5, CSS, JavaScript, TypeScript, Rust, R, JQuery

Developer Tools: AWS, Postman, PowerBI, Git, Azure, Docker, Jira, Trello, Notion

Libraries/Frameworks: Entity Framework Core, Angular, ReactJS, PostgreSQL, Flask, Django, NodeJS