# TEERTH PATEL

Plano, TX, USA

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# **SUMMARY**

Fast-Track BS/MS student looking for Software Development Internship. Experience with AI Research, Front-end/Back-end/Full-stack Development, and Machine Learning.

## **SKILLS**

C/C++, Java, Golang, Python, JavaScript, TypeScript, HTML/CSS, Bash, SQL, PHP, Rust, Prolog, Assembly, C#, Racket, React.js, Express.js, Redux.js, Pytorch, jQuery, GraphQL, NumPy, Pandas, Jest, Gin, MongoDB, Linux/Unix, Git, Docker, Postman, JIRA, Trello, Matplotlib

# **WORK EXPERIENCE**

#### **University of Texas - Dallas**

Aug 2023 - Present

Computer Science Mentor

Richardson, TX, USA

- Aided over 1000 students to learn C++, Java, discrete math, and computer architecture by demystifying concepts, and demonstrating problem-solving approaches.
- Developed new review materials to streamline and standardize the presentation of review sessions.

## **University of Texas - Dallas**

May 2023 - Aug 2023

NLP Research Internship

Richardson, TX, USA

- Introduced a novel method to obtain more accurate automated evaluations of Large Language Models (LLMs), collaborating in writing and publishing a paper in Transactions on Machine Learning.
- Developed AWS MTurk web interfaces using HTML/CSS/JavaScript to facilitate dataset labeling/annotation of 200+ documents.
- Processed, analyzed, and visualized results with pandas and matplotlib.

## **PROJECTS**

MNIST Classifier Mar 2024 - Mar 2024

- Created a CNN-based handwritten digit classifier with 98% accuracy on MNIST dataset.
- Trained a CNN with PyTorch and pandas on CSV data. Modifications included changing activation functions and pooling layers.

P2PFS Sep 2024 - Oct 2024

- Developed a peer to peer file sharing system utilizing networking and operating systems concepts. Interfaced with Sockets, Threads, Files, and Interprocess Communication to develop a responsive and efficient discovery and transfer protocol.
- Leveraged Docker and Docker Compose to create containerized testing environments.

WebConquid Dec 2023 - Present

- Developing web application to facilitate play of novel multiplayer strategy game, including login functionality, authentication, and room joining.
- Utilized graph algorithms such as BFS and Dijkstra to efficiently calculate the outcomes of specific moves and optimal paths.
- Built client-side with React and Redux using Typescript. Developed Application server with Express.js and JSON Web Token in Typescript, using WebSockets to integrate server with client. Stored and retrieved data via MongoDB Atlas.

Nebula Labs Jan 2023 - Present

API and Platform Developer

- Developed web scraper with Chromedp and Golang to collect data about student organizations at UTD for creation of a modernized organization directory
- Refactored backend to implement query validation with gorilla schema
- Implemented logging for the API using Golang, Gin, and Zerolog

## **EDUCATION**

**University of Texas - Dallas** 

Aug 2022 - May 2026

Bachelor's, Computer Science

GPA: 4