## Talha Nadeem

Education

### University of Texas at Arlington

Aug. 2022 - Present

Honors Bachelor of Science in Software Engineering

Arlington, Texas

#### **Projects**

#### Shell Development Projec $\mid C$

September 2024

- Developed a custom command-line shell in C
- Implemented built-in commands (cd, exit, quit) with error handling for robust execution
- Integrated process control and redirection using fork () and execvp () for efficient command parsing

#### MavPads — Student Housing Web App | Node.js, Tailwind CSS, MongoDB, Clerk, Vercel, Framer-Motion April 2025

- Built a full-stack web app to help UTA students explore and review off-campus housing options around campus.
- Integrated MongoDB for scalable data storage and efficient querying of apartment listings and user reviews.
- Designed a clean, responsive UI with Tailwind CSS, focusing on ease of navigation and mobile compatibility.

#### Pakistan Student Association Website | Node.js, Tailwind CSS, Vercel, Framer-motion

January 2025

- Developed and deployed a responsive web application to centralize information about PSA events, membership, and organizational updates
- Integrated features such as event listings with RSVP links with Stripe Payment API, and a contact form to streamline communication
- Hosted the application on Vercel, enabling continuous deployment and efficient performance optimization.

#### Achievements

#### 2nd Place - MoodSong - AI-Powered Wellness Web App | HackDAY UTA 2025

March 2025

- Developed a full-stack wellness web app that uses facial expression recognition to recommend mood-based songs using Gemini AI.
- Integrated a real-time community forum feature, enabling users to share feelings, support others, and build emotional
  connections.
- Utilized Node.js for backend logic, MongoDB for data storage, and Tailwind CSS for responsive and modern UI design

# UTA DATATHON Challenge WINNER — HealthIntelligences—AI-Powered Health Data Analysis April 2025 Node.js, React (Typescript), Tailwind CSS, MongoDB, Clerk, Vercel, Gemini API

- Engineered a comprehensive web platform to analyze and visualize personal and community health data, using AI-powered risk assessments and geospatial dashboards
- Integrated Google Gemini API to deliver personalized health insights and predictive risk forecasting based on uploaded datasets and real-world health APIs
- Implemented secure user authentication with Clerk, allowing users to manage personalized dashboards and access community health resources in a privacy-conscious environment

#### Technical Skills

Languages: Java, C, HTML/CSS, JavaScript, SQL, Typescript,

Technologies/Tools: VS Code, Eclipse, Google Cloud Platform, Android Studio, Postman, React, Node.js, Next.js

#### Leadership / Extracurricular

#### PLTL Leader (Peer Led Team Learning)

Spring 2023 - Present

MATH 1426 (CALC I

University of Texas at Arlington

- Guide students through core concepts of Calculus I, collaborative learning through peer-to-peer discussions
- Support students in developing critical thinking and analytical skills for tackling calculus problems

#### Pakistan Student Association

August 2024 – Present

General Secretary

University of Texas at Arlington

- Coordinated cultural and social events celebrating Pakistani heritage, managing logistics, team roles
- Executed high-impact events that enhanced community involvement and cultural engagement