# TARUN RANA

ranatarun5197@gmail.com | 312-526-2293 | Dallas, TX | LinkedIn | GitHub https://tarun-rana-portfolio.vercel.app/

#### **EDUCATION**

Master's in Science, Computer Science The University of Texas at Arlington, US Bachelor's in Engineering, Computer Engineering The University of Mumbai, IN

Aug 2021 - May 2023

GPA: 3.75

Aug 2014 - May 2018

GPA: 3.50

## **SKILLS**

**Programming:** JavaScript, TypeScript, Python, R, PHP, C++, and C#.

Frameworks, and tools: React.js, Nextjs, Flask, Node.js, Express.js, .NET Core, Mongoose, Laravel, Git, GitHub, AWS, Azure, Vercel, Postman, Bash, NumPy, Pandas, TensorFlow, Google Colab, Azure data studio.

Web and Database: Bootstrap, HTML5, CSS3, SASS, Styled Components, Tailwind CSS, MongoDB, PhpMyAdmin, XAMPP, Postgres SQL, Microsoft SQL server, Flexbox, Grid, UI/UX development, Framer Motion.

#### **EXPERIENCE**

## Full Stack Developer, UT Arlington

Sep 2023 – present

Project: UTA Neighborhood (Link: <a href="https://www.utaneigh.xyz/login">https://www.utaneigh.xyz/login</a>)

(Typescript, React.js, Styled Components, React-query, React-router, Node.js (express.js), Web Sockets, AWS (EC2, S3, Elastic IP, IAM roles), Nginx, Git, MongoDB, Mongoose, Bash, Postman)

- Enabled buying and selling of household items among students and faculty, ensuring seamless scalability and meeting the university community's needs.
- Developed a web app using TypeScript and React.js, integrating real-time chat and secure RESTful API with JWT authentication and authorization.
- Utilized MongoDB for data storage, conducted thorough testing with Postman, and deployed on AWS EC2 with nginx reverse proxy and stored images in AWS S3.

#### Full Stack Developer, Mindise Pvt Ltd

Feb 2019 - May 2021

Notable Projects: Kings United & Aditi Tracking (HTML5, SASS, JavaScript, Node.js, PostgreSQL, Git)

- Collaborated with clients to refine product requirements, resulting in streamlined UI behaviors and a 35% reduction in front-end development time.
- Developed a user-friendly interface with React, Redux Toolkit, and optimized backend architecture utilizing PostgreSQL and Prisma (ORM) for improved performance and scalability.
- Implemented comprehensive testing with Jest and Cypress, decreasing bug detection by 40% and enhancing code quality.

## **PROJECTS**

DL-Reader (Link: <a href="https://dl-reader.vercel.app/">https://dl-reader.vercel.app/</a>)

(TypeScript, React, Tailwind CSS, tesseract.js, Zustand, vite)

Implemented a driver's license scanning system utilizing Optical Character Recognition (tesseract.js OCR) technology to extract essential information such as first name, last name, issue date, expiration date, and address using regex.

#### E-Commerce (C#, ASP.NET Core, HTML, CSS, JavaScript, Microsoft SQL Server)

Developed a dynamic e-commerce web app, integrating user registration, shopping cart, and order tracking, with optimized code structure using Factory Method and Repository Pattern. Rigorously tested functionality with NUnit and Selenium, ensuring optimal user experience, scalability, and maintainability through C# and .NET technologies.

**CollegePlace** (SCSS, React.js, Laravel, Eloquent(ORM), MySQL, WordPress, RESTful API, UTA Cloud)
Led a team of 5 developers to create CollegePlace, a React.js based website facilitating club creation, blogging, and real-time chat for students. Utilized SCSS for styling, increased user engagement, and implemented a Laravel RESTful API with Eloquent ORM and phpMyAdmin integration for efficient data management.

## QueryMeter (Azure Cloud services, SQL, Database, Caching)

Developed a Flask web application to handle various datasets efficiently, deployed on Microsoft Azure with Azure Virtual Machines and Azure SQL services for scalability and reliability. Optimized query fetching with Redis caching by 68%, enhancing overall performance.

#### Multi-layer Neural Network (Python, NumPy, TensorFlow, Google Colab)

Engineered a high-accuracy neural network with TensorFlow and NumPy for MNIST image classification, achieving 98.73% accuracy. Enhanced performance by 5% on average by integrating Convolutional and Recurrent Neural Networks for image classification tasks.

## Portfolio (Next.js, Tailwind CSS, Git, Vercel)

Created an eye-catching personal portfolio website with TypeScript, Next.js, Framer Motion, Context API, and Tailwind CSS, increasing user engagement by 40% and mobile traffic by 50%, deployed on Vercel with Git for CD.