Harshitha Karnati (Junior Web Stack Developer)

Harshithareddi14@gmail.com | +1 (704) 641-7810

SUMMARY

- > Junior Web Developer with over 2 years of experience specializing in full-stack web development, proficient in React, Next.js, Node.js, and MongoDB.
- > Successfully delivered high-impact web applications at Teton Private Ltd., focusing on intuitive user interfaces, performance optimization, and seamless integration of AWS and Stripe technologies.
- ➤ Well-versed in front-end performance optimization techniques and debugging methodologies.
- Experienced with Agile methodologies and version control systems such as Git.
- > Demonstrates excellent problem-solving skills and collaborates effectively within cross-functional teams.
- A continuous learner with a proactive approach to skill development.

TECHNICAL SKILLS

Programming LanguagesJava, Python, JavaScriptDatabasesMySQL, MongoDB

Front-End Technologies HTML, CSS, Bootstrap, Tailwind, React.js, Next.js, Vue.js

Back-End Technologies Node.js, Express.js

EDUCATION

Master of Science (M.S.) - Information Technology

Jan 2023 - May 2024

North Carolina A&T State University, Greensboro, NC - CGPA: 3.85

Bachelor of Technology (B.Tech.) - Electronics and Communication Engineering

Aug 2017 - Jun 2021

VNR Vignana Jyothi Institute of Engineering & Technology - CGPA: 9.25

North Carolina A&T State University

May 2023 - May 2024

Role: Graduate Research Assistant

Responsibilities:

- > Conducted research on a project titled "Preserving Medical Data with Renyi Differential Privacy", focusing on privacy-preserving techniques for medical data.
- ➤ Investigated the potential of **Renyi Differential Privacy (RDP)** as a superior solution for safeguarding medical data compared to traditional **(epsilon, delta)-differential privacy (DP)** models.
- ➤ Conducted a comparative analysis of the **privacy and accuracy trade-offs** between RDP and **non-differentially private (Non-DP)** models across various optimizers.
- ➤ Performed experimentation using **Python** and libraries such as **TensorFlow**, **PyTorch**, **Opacus** and **NumPy** to demonstrate that RDP offers significantly improved privacy without substantial compromises in accuracy.
- > Submitted a research paper detailing our findings to the AHOT 2024 conference and presented the paper, which is currently under review.
- > Collaborated with faculty members and other research assistants, contributing to the university's research mission by conducting research relevant to the major course of study.
- > Gained expertise in privacy-preserving techniques, deep learning models, and data protection strategies specific to the medical field.
- > Presented findings at academic conferences and seminars, advocating for the adoption of advanced **privacy- preserving techniques** in the ethical handling of sensitive medical information in machine learning applications.

Role: Junior Web Developer

Responsibilities:

> Developed and maintained web applications using HTML, CSS, JavaScript, React, Next.js, and TypeScript, ensuring responsive and interactive user interfaces.

- > Built and integrated **UI components**, participating in the implementation of **design systems** to maintain **consistency** across projects.
- > Created and managed backend services, developing over 50 RESTful APIs with functionalities such as user authentication, data management, and third-party integrations using ExpressJS, Node.js, Flask, MongoDB, and AWS.
- > Collaborated with **cross-functional teams**, including **designers**, **backend developers**, and **QA engineers**, to deliver **high-quality products on schedule**.
- > Engaged in code reviews, learning to identify and fix bugs, optimize code for performance, and implement best coding practices and industry standards.
- Architected **front-end applications** from the ground up, structuring the codebase using **Next.js** for **scalability** and **maintainability**.
- > Developed a trading platform utilizing the TradingView library, enhancing data visualization and user interaction for financial services.
- > Optimized application performance by refactoring code and database queries, resulting in a 20% improvement in response times.
- > Engaged in **strategic planning** and **problem-solving** to meet **client needs**, proposing and implementing **effective technical solutions**.

PROJECTS

Interactive Code Editor Developed an online code editor using React, Redux, Ace Editor, Node.js, and MongoDB. Features real-time coding with live preview, syntax highlighting, code linting, and secure user authentication.

Video Streaming Platform Created a video streaming platform with React, Node.js, AWS S3, FFmpeg, and AWS CloudFront. Enables video upload, adaptive streaming, user profiles, comments, likes, and recommendations.

Social Networking Application Developed a social networking app with React Native, Firebase, and Node.js. Supports image uploads, real-time notifications, user authentication, and an interactive feed for user engagement.

E-Commerce Platform Created an e-commerce website using Next.js, Redux, Stripe API, and MongoDB. Features product listings, a shopping cart, secure checkout process, and payment integration for seamless online shopping.