Pragya Khanna

+1 (519)-500-1986 | pragyakhanna0810@gmail.com | linkedin.com/in/pragya-khanna | https://pragyakhanna.github.io

Professional Summary

Computer Engineering graduate with 3+ years of experience building responsive, cross-platform web apps using **React**, **Next.js**, and **TypeScript**. Brings proven strengths in **UI/UX**, **Agile development**, **CI/CD pipelines**, and **cross-functional collaboration**. Seeking to contribute to impactful, user-focused products with clean, maintainable code.

Education

McMaster University, B.Eng in Computer Engineering (Co-op) Sept 2020 – Apr 2025

- McMaster Honor Award ($1,000)
- **Coursework:** Data Structures & Algorithms, Operating Systems, Embedded Systems, Algorithm Design & Analysis

Technologies

Languages: C#, JavaScript, TypeScript, Python, SQL, HTML/CSS

Frameworks: React, Redux, Node.js, Express.js, .NET, Next.js, Tailwind CSS

Tools & Platforms: Docker, Jest, Jenkins, Azure DevOps, Git, Firebase, MongoDB Atlas, NGINX, Visual Studio, AWS

Databases: Microsoft SQL Server, MongoDB, Firebase Firestore

Experience

Full Stack Developer (Co-op), L3Harris Technologies – Waterdown, ON Sept 2023 – Sept 2024

- Built a **C#/.NET** dashboard to automate ticket triaging, saving **$100K+ annually**.
- Developed **15+ full-stack features** across **3 major projects** in **Agile teams** using **JavaScript**, **HTML/CSS**, and **Azure SQL**.
- Optimized **Azure SQL** performance by **50%** through schema redesign and stored procedure tuning.
- Implemented error handling and recovery logic in **.NET** services, reducing downtime by **40%**.
- Integrated **Docker**, **Jenkins**, and unit tests into the **CI/CD pipeline** to cut deployment errors by 35%.

Teaching Assistant, Sessional, McMaster University - Hamilton, ON Sept 2023 – April 2025

- Taught system-level programming in **Python, C, Linux** to 80+ engineering students through hands-on labs and projects.
- Troubleshot c**ode bugs, logic errors**, and **performance issues** one-on-one, helping students resolve problems **twice** as fast.
- Reviewed 200+ assignments with feedback focused on **correctness, clarity,** and **coding best practices**.

Projects

Stealth Startup (Personal Startup) ***(React Native, Redux, Express.js, MongoDB, NGINX)*** Dec 2024 – Present

- Built a cross-platform app using **React Native CLI** and **TypeScript**, enabling simultaneous iOS, Android, and Web releases.
- Developed backend APIs with **Node.js** and integrated **AWS Cognito**, reducing authentication errors by 40%.
- Integrated **AWS S3** and **DynamoDB**, enabling low-latency file uploads and scalable real-time data access.

Fit-Plant – Smart Plant Monitoring System ***(React, Next.js, Tailwind, Node.js, Firebase)*** Dec 2024 – Apr 2025

- Developed a cross-platform IoT dashboard using **React** and **Next.js**, enabling real-time monitoring of plant health data.
- Logged live sensor data via **Firebase Firestore** and secured access with **Firebase Auth**, supporting multi-user sessions.
- Reduced dashboard load times by 30% by optimizing API calls with **Node.js** and **Axios**.

Online File Sharing System ***(Python, TCP/UDP, Threading, Socket Programming)*** Apr 2025

- Developed a multithreaded client-server system with **TCP sockets**, enabling real-time file transfers across clients.
- Implemented **UDP-based service discovery** for lightweight peer detection and faster connection setup.
- Designed a custom protocol for concurrent uploads/downloads and directory browsing, improving transfer reliability.

Secure Grade Retrieval System ***(Python, TCP, CSV, SHA-256)*** Mar 2025

- Built a secure grade access system using **TCP sockets** and **SHA-256** hashing, ensuring encrypted user authentication.
- Parsed CSV records and delivered grade results via command-based queries, improving access accuracy and response time.