

Nandhini Dhanasekaran

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EDUCATION

University of Washington

Master of Science in Computer Science and Systems

Seattle, WA

Sep. 2022 – Mar 2024

Anna University

Bachelor's in Electronics and Communication

Chennai, IN

Nov. 2016 – Apr 2020

PROFESSIONAL EXPERIENCE

Software Engineer - Front End

Health Chain

June 2024 – Present

Plano, TX

- Developed a Consent Management Portal in Next.js, utilizing TypeScript, React, and UI libraries like Tailwind CSS and Lucide Icons for a responsive and visually appealing interface.
- Engineered and deployed backend services with API authentication and error handling for reliable healthcare data management.
- Integrated dynamic UI components with API services using React Query, improving performance and state synchronization.
- Built a scalable frontend architecture with modular components, client-side routing, and state management.

Software Engineer

Infosys Limited

July 2020 – August 2022

Chennai, IN

- Led quality assurance for a Belgium-based banking platform, reducing microservice errors by 30% through Automation with JAVA and Selenium, while managing test cases, reporting and tracking bugs in JIRA.
- Collaborated with multi-functional teams to define requirements, develop test plans, design test cases within the SDLC, and support releases, while working in an agile environment to ensure product reliability and performance.
- Conducted extensive manual and automation testing, achieving a 50% reduction in regression testing time and consistently exceeding daily targets.
- Leveraged Grafana to track and visualize the quality metrics, driving project success in a €5.578 billion revenue environment.

Software Engineer Intern- Front End

MulticoreWare Inc

Dec 2019 - Mar 2020

Chennai, IN

- Developed dynamic and responsive user interfaces for machine learning dashboards using React to facilitate real-time data visualization and ensure seamless integration of back-end data.
- Worked alongside UI/UX designers to understand best practices in web design and implement user-friendly features for enhanced user experience.

PROJECTS

Enhanced Big Data Processing Pipeline | Python, ML

Oct 2023 - Dec 2023

- Spearheaded the development of a highly efficient Big Data analytics pipeline, integrating Google Colab, python libraries, and trained ML models including Logistic Regression, XGBoost Classifier, and KMeans.
- Streamlined data processing through Data Wrangling, EDA, and advanced Prediction, Inference, and Validation steps.
- Realized a significant enhancement with a 40% acceleration in data processing, concurrently achieving a 15% reduction in operational costs.

MS SQL Query Optimization Initiative | SQL

Jan 2023 - Mar 2023

- Facilitated MS SQL query optimization initiative using Microsoft SQL Server resulting in a 25% improvement in query processing times by analyzing query plan changes, adjusting plans based on cardinalities, and resolving errors.
- Accelerated user workflows through streamlined data retrieval and analysis by substantially decreasing query processing times.

AWS TLQ Data Pipeline | Java, AWS Lambda, AWS ECS, AWS API Gateway, Amazon S3, SQLite

Oct 2022 - Nov 2022

- Constructed a scalable data processing pipeline using JAVA and AWS, enabling efficient handling of large, dynamic data sets.
- Incorporated advanced query filtering, aggregation, and transformation techniques in SQLite, leveraging AWS resources, resulting in a 45% reduction in data stream processing costs.

RESEARCH PUBLICATION

IoT Based Emergency Alert System: A novel multi-faceted safety and health monitoring system integrating IoT to enhance road safety, women safety, and provide continuous health monitoring for the elderly.