Arshita

Legisland Legis

EDUCATION

University of Waterloo • Waterloo, Canada

September 2024 – Present

Masters of Engineering • Electrical and Computer Engineering

Guru Nanak Dev University • Amritsar, India

July 2019 - May 2023

SKILLS

• Programming languages: Python, JavaScript, TypeScript, Java, C++.

Bachelors of Technology • Computer Engineering • Percentage: 88.9

- Frameworks/Libraries: HTML, CSS, React, Node.js, Express.js, Next.js, Material UI.
- DevOp and Tools: GitHub Actions, CI/CD, Jenkins, Kubernetes, Postman, Git, JIRA.
- Cloud: Amazon Web Services (AWS).
- Database Management: SQL, MongoDB.
- Tools and Others: Data Structures and Algorithms, REST APIs, Agile, Scrum, Unit testing, Hadoop and Elastic Map Reduce, Machine Learning(ML) and Artificial Intelligence(AI), Redux.

Work Experience

Software Development Engineer – BNG Advanced Mobile Solutions Pvt Ltd Gurgaon, Harvana, India

July 2023 – July 2024

- Built a centralized content management system (CMS) reducing manual content handling time by 80% across 5+ applications.
- Contributed to the development of the Customer Value Management (CVM) system to drive customer retention, manage personalized offer campaigns, and support targeted marketing strategies for telecom clients.

Software Engineer Intern – BNG Advanced Mobile Solutions Pvt Ltd Gurgaon , Haryana, India

Dec 2022 – June 2023

- Developed a Customer Care Interface (CCI) in React to efficiently manage user subscriptions and billing for telecom operators, streamlining account management and reducing customer support handling time by 35%.
- Improved system reliability by increasing unit test coverage from 65% to 75% and reducing post-release bugs by 20% through feature development, debugging, and code reviews.

TECHNICAL PROJECTS

CVM – Customer Value Management

- Developed interactive dashboards using Kibana and UI pages using React and Material UI components, improving data visualization and user engagement.
- Implemented backend-driven UI rendering using JSON configs, streamlining development and enabling scalable, rapid feature delivery.
- Utilized Redux for centralized state management, reducing UI inconsistencies, improved application responsiveness and easier maintainability.

Fixify - Home Services Booking Platform

- Developed a full-stack web app with React (Vite) for seamless user experience and responsive design.
- Built REST APIs using **Node.js** and Express.js, with **MongoDB** and Mongoose for efficient service booking and user management.
- Automated CI/CD pipelines with GitHub Actions, ensuring reliable builds and testing.
- Integrated **JWT** authentication for secure user login and role-based access control.

Publications

Breast Cancer Detection Using Meta Learning And ANN – International Journal of All Research Education and Scientific Methods (IJARESM) May 2022

- Developed a user-friendly interface for inputting numeric medical data, enabling **real-time predictions** for breast cancer detection.
- Engineered a hybrid algorithm combining meta-learning and artificial neural networks, rigorously evaluated using metrics such as Accuracy, Precision, Recall, F1 Score, and Confusion Matrix.
- Achieved **higher accuracy** compared to most peer-reviewed studies in the field, demonstrating the model's potential for enhancing early diagnostic capabilities.

VOLUNTEER EXPERIENCE

- Serving as a Board Director at the **Graduate Student Association** (GSA), contributing to strategic planning, policy development, and advocacy initiatives representing over **6,000** graduate students.
- Led events to empower women in STEM, partnered with industry and campus groups, increased participation by 30% as a Director of Professional Development in Women In Engineering(WiE).