

SKILLS & TECHNOLOGIES

- **Skills** – Web Application Development, CI/CD, Applied Machine Learning, Mobile Application Development
- **Technologies** - Python, C#, .NET, JavaScript, React, Vue, AngularJS, Postgres, SQL Server, AWS, Azure, Docker, GitHub Actions

EDUCATION

- **Master's in Computer Science Engineering**, Texas A&M University, College Station, USA **2017 – 2019**
- **Bachelor's in Computer Science Engineering**, Bharati Vidyapeeth's College of Engineering, Delhi, India **2011 – 2015**

WORK EXPERIENCE**Software Engineering Team Lead** **Accenture, Texas (USA) & Gurugram (India)** **2019– Present**

Supply Chain Platform – Mentored a team of 2 engineers in the design, development, and delivery of enterprise applications. Collaborated with cross-functional distributed teams to define project requirements and milestones resulting in increased productivity for the team.

Performance Analysis Dashboard for Building Management System – Engaged in backend design, architecture and development for business-critical features with a focus on data optimizations resulting in a 10% improvement in application performance.

- Helped establishing best coding practices and coding standards leading to a reduction in post-release defects by 20%.

EdTech Dashboard - Developed end-to-end features for a web-based administrative interface for the Ed-Fi ODS/API as part of a student data management suite of tools. The standalone application is currently being used by admins across 11,900 school districts in 32 states.

- Engaged in feature design, estimation, implementation, and code reviews in a cross-organizational environment.
- Worked on an on-premises installer for the application using PowerShell. Implemented packaging scripts to facilitate software distribution.
- Involved in systematic migration of the application from .NET 4.8 to .NET Core paving the way for the platform to be deployed on Docker.
- Packaged an existing .NET Core app in a Docker image. Created deployment scripts to configure and run the app in a container. Created docker compose configurations to handle the multi-container setup. Automated container deployment on Azure.
- Created GitHub Action workflows as part of the CI/CD process to support a variety of infrastructure targets.

EMS Power BI Dashboard - Developed visual reports, dashboards, and KPI scorecards using PowerBI desktop based on the emergency trip data for 554 ambulances across 10 states.

Microservices Contract Testing Tool - Developed and maintained an open-source tool for testing contracts used by both producers and consumers in distributed systems. The tool is currently being used in 2 enterprise projects.

- Built the API on .NET Core with a Razor and Vue front-end.
- Set up unit testing with Jest, e2e testing with TestCafe, and automated deployment.

Inventory Management Dashboard - Developed and designed container inventory management API on ASP.NET MVC with a React front-end.

- Handled all aspects of the application including maintenance, unit tests, debugging, and deployment.

Graduate Assistant **Texas A&M University, College Station** **2018 – 2019**

- Applied Cognitive Ergonomics Lab - Designed and built a sensor-focused smart wearable app to collect biometric data and decipher PTSD triggers from regular physical activity. Field-tested on 30 veterans to further add self-reporting features based on feedback.
- Developed a 3-tiered MVVM cadet management system using .NET framework. The app is actively used by 2500 student cadets and staff to keep track of cadet progress and training. Awarded a "gold star" by the Division of Student Affairs IT for my contributions.

Software Consultant **Lochbridge, India** **2015– 2017**

Project Portfolio Management Platform - Built a hybrid mobile app to track resources, timesheets, tasks, and expenses for over 1000 professional IT services teams.

- Designed UI/UX wireframe models and Sencha Touch modules for resource-tracking features. Modified Apache Cordova plugins to enhance the mobile app with camera integration, push notification, and in-app notification features. Implemented app localization to support 10+ languages.
- Maintained the web platform's RESTful API and added new endpoints for resource tracking.

Digital Parenting Platform - Developed a hybrid mobile app enabling parents to mediate their child's social media interactions.

- Conducted sentiment analysis on real-time unstructured data streams and of the sensitivity of social media interactions followed by real-time notifications to guardians. Used MongoDB to handle real-time data reporting and analytics operations.

PROJECTS

- **Medical Concept Extraction App** - Extracted medical concepts from free-form text data using deep learning architectures like CNNs and RNNs (LSTM and bi-LSTM). Used pre-trained word embeddings like GloVe and fastText to improve accuracy.
- **Book Recommender App** - Implemented and evaluated core algorithms for document indexing, retrieval, clustering, and categorization. Developed a book recommender system leveraging matrix-factorization to encourage reading & book discovery based on leveled reading.
- **Advanced Driver Assistance System** - Built a Raspberry Pi based system with a touchscreen interface featuring a PyQt based GUI, lane departure warning system, facial recognition, rear-view camera stream, emergency SMS service, and weather information.

AWARDS

- **Awards** - Top 10% in graduating class (2015), National Certificate of Merit in Computer Science (2011), Microsoft Student Partner