NISHANT BASU

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Education

Texas A&M University, College Station, Texas	May 2026
Master of Science in Computer Science	CGPA : 3.66/4

Relevant Coursework

- OOPs
- Machine Learning
- Software Engineering
- Network Security

Technical Skills

Languages: TypeScript, JavaScript, HTML5, CSS, C++, C#, .NET, Python, Dart, SQL, PostgreSQL, MongoDB.
Developer Tools: Version Control (Git), Gitlab, CI/CD, Android Studio, Splunk, Postman, Fiddler, Jira, Confluence.
Technologies/Frameworks: Machine Learning libraries, Lit Element, NodeJS, Web Components, Vue.js, ReactJS, Angular, ASP.Net Core, Django, ExpressJS, Micro Front-ends, Micro Services, Docker, Kubernetes, NGINX, Jest, Rollup-Webpack, Open WC, SinonJS, ChaiJS, Mocha, Web-Test-Runner, JUnit, XUnit, Tailwind.
Cloud Platforms: Pivotal Cloud Foundry, Microsoft Azure, AWS

Experience

Tesla

Software Engineering Intern — May 2025 – Present
- Building backend services for Tesla's vehicle ordering flow, improving customer configuring and purchase experience.

Dell Technologies

Senior Software Engineer — April 2024 – August 2021
- Led a team of 6 developers in developing and improving the global checkout system for Dell.com and Premier platform.
- Acted as a subject matter expert (SME) for frontend infrastructure across all cart and checkout teams to drive consistency and streamline order processing workflows, encompassing the full software development lifecycle (Analysis, Design, Build, QA, Security, Deployment). Leveraged software testing principles and methodologies, as well as automation tools and utilities, to enhance efficiency and ensure high-quality deliverables.
- Oversaw the development of 50+ micro front-ends and microservices, using ASP.NET Core and C# for REST APIs backend, and LitElement web-components in TypeScript as frontend, improving scalability and viability of the e-commerce platform, including seamless integration with payment systems and checkout workflows.
- Utilized Pivotal Cloud Foundry, Git version control, and CI/CD tools for cloud deployment and management of microservices, ensuring 99.9% up-time during high-traffic events like Black Friday sales, while supporting secure payment processing and transaction workflows.
- Practiced Agile methodologies, participating in daily scrums, sprint planning, and handled code reviews while documenting processes, designs and results to ensure efficient collaboration and teamwork.
- Developed suffix-based web components to enable lazy loading, reducing time-to-interact by 5%, producing a robust user experience optimized for responsive mobile and web checkout interfaces.
- Created an internal NPM package for dynamic loading of web components, enabling seamless on-load operations, reducing bundle size by 30%.

Projects

Multimodal fusion, Food Calorie prediction | Python, Machine Learning, Transformers
- Developed a multimodal deep learning framework integrating CGM sensors, food images, and viome data to predict lunch calorie intake, achieving 32.7% improvement in validation accuracy within first 3 epochs
- Implemented specialized neural architectures (LSTM, CNN) with attention fusion mechanisms and gradient clipping, reducing RMSRE from 1.13 to 0.78 through dynamic modality weighting.

Logistics Management for CureBay | Express, Lit, Nginx
- Freelanced to create a logistic management app, **DMS(ppt-link)**, handling approximately 1,200-1,500 orders daily across 3 states in India. Built and managing independently using Express.js, MongoDB, Lit and Three.js.

Lit Web Component Lazy Loader | Typescript, Node, NPM
- Developed an NPM package to lazy load suffix-based Lit element dynamic components, eliminating 100% of initial load for non-critical web components.
- Reduced initial bundle size by 30% and improved time-to-interact by 5% for micro front-end applications.

Accomplishments / Training

- GB-MERIT Undergraduate Scholarship (IIIT Bhubaneswar) for top 3 academic achievers in IT Major.
- Dell Hack-To-Hire Hackathon Winner.
- Nav Ujjwal Hackathon Finalist for **Parchi** - Mobile App for paper less Medical Services.
- ACM Summer School on Algorithmic and Theoretical Aspects of Machine Learning at IIIT Bangalore.