# Prem Banker

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## Education

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| **Virginia Tech**, Masters in Computer Science | August 2023 – May 2025 |
| **Pandit Deendayal Energy University**, Bachelors in Computer Engineering | July 2017 – May 2021 |

## Experience

**Software Engineer**, Obviant – Arlington, VA, USA — Dec 2024 – Present

*Tech Stack: React, Next.js, Node.js, TypeScript, AWS, Python, Terraform, Pinecone VectorDB, Elasticsearch, Redis*

- Spearheaded full-stack development at a Defense startup, contributing to web applications and **NLP** solutions as a **Founding Engineer**.
- Built a Retrieval-Augmented Generation (**RAG**) recommender system that delivers personalized Department of Defense insights based on user feedback and relationships.
- Implemented Role-Based Access Control (**RBAC**) for file-sharing features, enabling granular, Google Drive-like permissions across projects.
- Enhanced semantic search by optimizing **Pinecone** and **Elasticsearch**, reducing response time by **500ms**.

**Full Stack Developer**, Quicko – Ahmedabad, India — May 2021 – June 2023

*Tech Stack: Java SpringBoot, Node.js, Angular, Flutter, DynamoDB, Oracle SQL, AWS, GCP, Docker, Jenkins, Git*

- Led MEET development, boosting revenue by **80%** through automation of scheduling, payments, order lifecycle, and assignments using Flutter, Node.js, and AWS.
- Optimized appointment scheduling with **AWS CloudFront** caching and EventBridge, reducing API response time from **4s to 200ms**.
- Built a Calendly-like booking system with Google Calendar **APIs and OAuth**, saving over **$10k** annually by removing third-party dependencies.
- Developed a mobile PWA for income tax filing, integrated into major Indian brokerage apps, onboarding **500,000+** users in 2022.
- Created Clique, Quicko's affiliate marketing platform, using Angular and **Java** SpringBoot, achieving **800,000+** sign-ups through 100+ affiliates.
- Reduced AWS Lambda cold starts from **4s to <50ms** with middleware in Java and Node.js;

**Application Development Intern**, EVOSYS – Ahmedabad, India — January 2021 – April 2021

*Tech Stack: Javascript, PL-SQL, MySQL, Java, Oracle Cloud Infrastructure*

- Established a data tunnel between **Oracle Fusion applications** using Oracle Integrations Cloud.
- Implemented an Oracle Integration Cloud Service (OICS) workflow to **automate file transfer**, processing, and delivery via SFTP, improving efficiency and reducing manual intervention.

## Achievements

- Won the Ripple Award for the best project using Ripple Chain at **MorganHacks** 2024 with CarbonKarma, a sustainable blockchain platform designed to help companies achieve carbon-neutral goals.
- Won the **LetsHack 1.0** Hackathon by developing a prototype for a Smart Parking System using deep learning and CNNs, earning recognition from the state government.
- Achieved 2nd Runners-up position out of 130 teams in **LetsHack 2.0** by developing a House Price Aggregator and Prediction Model for areas in Ahmedabad, India.

## Skills and Volunteering Experiences

**Languages:** Java, Typescript, Javascript, Dart, Python, C, HTML, CSS

**Frameworks:** SpringBoot, Node.js, Angular, Flutter, React

**Cloud and other Technologies:** Git, AWS, Docker, GCP

**Volunteering:** National Service Scheme, India (2017-2018), Research Head of Society of Mathematics, PDEU (2018-2020)