

# Akash Shanmuganathan

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## Skills

**Business Analysis:** BRD, FRD, User Stories, JIRA, Confluence, Stakeholder Alignment

**Tools & Frameworks:** Tableau, Figma, JIRA, SQL, Excel, Python (pandas), FastAPI, Streamlit

**Platforms:** Web, Android, Postgres, MySQL, Docker, Render, Vercel

**AI/ML Techniques:** SHAP Explainability, Credit Scoring Models, Data Drift Detection

**Domain Knowledge:** Fintech, Health Analytics, HR Analytics, Agile/Scrum, SDLC

## Experience

### Hexaware Technologies

Chennai, TN, India

#### Software Engineer

Jun 2022 – Jul 2023

- Translated 50+ business rules into backend logic by working with cross-functional teams, improving modularization and regulatory clarity.
- Built Tableau dashboards linking JIRA metrics, enhancing stakeholder decision speed by 30%.
- Led QA validations for 15+ financial APIs using SQL/Postman, maintaining 99% accuracy in index workflows.
- Optimized 10+ SQL procedures, reducing query latency by 35% in stock data delivery pipelines.

### Hexaware Technologies

Chennai, TN, India

#### Associate Software Engineer

Jan 2021 – May 2022

- Validated investment workflows by automating test cases using Postman, improving QA cycle accuracy by 99%.
- Rewrote legacy backend logic into Spring Boot, improving maintainability and reducing bugs by 40%.
- Collaborated with BAs and stakeholders to refine requirements for mobile banking features (loan eligibility, card view).
- Participated in 15+ Agile sprints, ensuring timely delivery of embedded banking modules.

### Neo Technologies

Chennai, India

#### Data Analyst Intern

Jul 2020 – Dec 2020

- Automated data QA pipelines using Python and pandas, improving data integrity for public health dashboards by 30%.
- Developed anomaly detection and schema validation scripts for multi-source datasets, streamlining pre-ML ingestion checks.
- Collaborated on SQL-based ETL validation of 10K+ records/day, ensuring reliable input for downstream analytics and modeling.

## Projects

### AI-Powered Academic Collaboration Platform - JIRA, Confluence, BRD, User Research, Figma

- Led BRD creation and JIRA backlog grooming for a next-gen academic portal supporting peer reviews and content sharing. Translated user interviews into 50+ actionable stories and designed UI flows in Figma.

### Reflect X – Smart Mirror Product Strategy - Agile, Figma, Market Research, Trello, JIRA

- Drove product-market fit through competitive analysis of 10+ smart devices. Developed Agile sprint plans and wireframes to guide MVP delivery within 6 weeks.

### Credit Risk Scoring & Fraud Detection Dashboard - Python, SHAP, LightGBM, FastAPI, Streamlit, Docker

- Built an explainable credit risk engine with SHAP and LightGBM (85%+ AUC). Designed a real-time dashboard with Streamlit to aid loan officers in risk assessment.

### FinSight – Personal Finance GPT Assistant - React, Flask, PostgreSQL, GPT API, Chart.js

- Developed a full-stack app that visualizes spending trends and offers AI-driven financial advice. Designed PostgreSQL pipelines and integrated OpenRouter GPT APIs.

## Education

Northeastern University, Boston, MA

Sep 2023 – May 2025

### Master of Science in Engineering Management

Anna University, Chennai, India

Jun 2017 – Apr 2021

### Bachelor of Engineering in Electrical and Electronics Engineering