

# AKASH T S M

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## SUMMARY

Computer Science undergraduate (CGPA: 9.38) at VIT with expertise in **application design, SDLC, impact analysis, and system enhancement**. Skilled in **Java, Python, C++, SQL, Spring Boot, FastAPI, React, and AWS** with hands-on experience in **secure APIs, fraud detection, and cloud-native financial systems**. Experienced in **requirement gathering, unit testing, and defect fixing**. Passionate about **building scalable, secure applications** and contributing to **performance tuning and knowledge sharing**. Seeking an **Intern Trainee role at NatWest**.

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## EDUCATION

**Vellore Institute of Technology (2023–2027)** — B.Tech in Computer Science | CGPA: **9.38**

**Sunbeam Senior Secondary School (2021–2023)** — **92%**

**Bhagwan Mahaveer Dayaniketan Jain School (2009–2021)** — **93%**

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## SKILLS

- **Languages & Frameworks:** Java, Python, C, C++, JavaScript (React, Node.js), Spring Boot, FastAPI
  - **Cloud & DevOps:** AWS (EC2, Lambda, S3), Docker, GitHub Actions (CI/CD)
  - **Databases:** PostgreSQL, MongoDB, MySQL
  - **Software Engineering:** SDLC, Agile, Requirement Gathering, Impact Analysis, Application Design, Unit Testing, Defect Fixing, Performance Tuning
  - **Other:** REST APIs, OAuth2/JWT, AES/RSA Encryption, System Design, Knowledge Sharing, DSA
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## PROJECTS

**Secure FinTech Expense Tracker** 📈 | **Spring Boot, React, PostgreSQL, AWS**

- Conducted **requirement analysis** and designed a secure expense tracker with **JWT/OAuth2 authentication**, improving login security by **70%**.
- Built analytics dashboard for spend patterns & fraud alerts, **reducing false positives by 25%**.
- Automated testing & CI/CD pipeline → **cut defect fixing time by 40%**.

**Cloud-Based Payment Gateway Simulator** 🌐 | **Node.js, MongoDB, AWS Lambda, Docker**

- Designed a cloud-native payment simulator with **impact analysis & component-level design** for card transactions.

- Integrated OTP microservice with AWS Lambda, **reducing response latency by 30%**.
- Containerized system using Docker, **improving performance scalability by 35%**.

#### Fraud Detection Microservice | Python, FastAPI, Scikit-learn

- Developed ML-based fraud detection achieving **92% accuracy** with real-time scoring API.
  - Implemented **unit tests for API endpoints**, reducing defect rate by **20%**.
  - Optimized API performance to handle **10K+ requests/min with <200ms latency**.
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## LEADERSHIP & ACTIVITIES

- **Hackathon Finalist:** Built a fintech fraud detection system within **24 hours**.
  - **Team Lead:** Coordinated a **4-member team** across requirement analysis, design, testing, and deployment.
  - **Peer Mentor:** Guided juniors on **API design, ML integration, and defect debugging**.
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## CERTIFICATIONS & ACHIEVEMENTS

- **Machine Learning Specialization (Coursera, Andrew Ng)**
- **Generative AI with IBM WatsonX (IBM)**
- Academic Excellence: CGPA **9.38** (Top performer)