

NAVEENKUMAR N

Email: naveennkumar0312@gmail.com | **Phone:** +91 8838107424

Github: [Naveenkumar3003](#) | **Linkedin:** [naveen-kumar-15b7b7343](#)

Computer Science student with a strong foundation in programming, software development, and problem-solving. Passionate about building impactful solutions and continuously learning new technologies. Eager to contribute technical skills and innovation to a dynamic, growth-oriented organization.

EXPERIENCE

AstraZeneca – Summer Intern

2026 (May-July)

- Built a biomedical AI assistant using React, FastAPI, Neo4j, and Pydantic AI to retrieve medical information using LLMs.
- Added validation and self-correction to ensure responses are accurate and based only on trusted knowledge-graph data.
- Created an automated evaluation system to measure accuracy, concept coverage, similarity, and response quality.

PROJECTS

Pet Adoption System

- Developed a full-stack web application for browsing pets and managing adoption requests with user and admin authentication.
- Built MongoDB-based data architecture with Express.js backend and React.js frontend for seamless interaction.
- Implemented category-based search, adoption history tracking, request approval system, and admin control dashboard.

Canteen Menu Management API

- Built a Spring Boot REST API for college canteen menu management with JWT authentication and ADMIN/USER roles.
- Implemented secure login, password hashing, token validation, and role-based access using Spring Security.
- Used Spring Data JPA, MySQL, DTO validation, exception handling, and service-layer architecture for a clean and reliable backend.

Post-Quantum Secure Authentication for 5G N1 Interface

- Designed a quantum-resistant authentication system for secure communication in 5G networks.
- Used ML-KEM for key exchange and ML-DSA for digital signatures to improve security.
- Evaluated latency, bandwidth usage, and computational cost to check its feasibility for future 5G deployments.

SKILLS

Programming Languages: C, C++, Python (Intermediate), Java (Intermediate), SQL

Full Stack Development: HTML, CSS, JavaScript, React, Express, Springboot

Concepts: OOP, DBMS, Data Structures & Algorithms, CN, OS

Soft Skills: Problem Solving, Leadership, Team player, Critical Thinking

Tools: Github, Postman, VS Code

EDUCATION

B.E. Computer Science and Engineering

Madras Institute of Technology, Anna University, Chennai

CGPA: 8.53

Sep 2023 – Present

Higher Secondary (HSC)

Swami Matriculation Higher Secondary School, Ariyalur

Percentage: 98%

Jun 2022 – Apr 2023

ACHIEVEMENTS & CERTIFICATIONS

- Runner of Reverse Coding and IPL Auction on MIT Symposiums.
- Finalist in Coding with AI Competition and GDG Hackathon.
- Secured 5th Rank in Class 12 at the school level.
- Solved 250+ Leetcode Problems.
- NPTEL – Python for Data Science (2025), UI/UX - Edlearnity

CO-CURRICULAR ACTIVITIES

- Member of ACT Technical Team
- Member of QuantuMIT club
- NSS Volunteer
- Member of Tamil Mandram Dance club