## **GARESHMA NAGALAPATTI**

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### **SUMMARY**

Software Engineer with 3.5+ years of experience in backend development, API integration, and workflow automation using Java, Spring Boot, RESTful APIs, and Oracle SQL. Proven track record of building scalable enterprise systems across Oracle Cloud and PeopleSoft platforms. Proficient in Git, Agile methodologies, and cross-functional collaboration. Currently contributing to a bilingual math learning app as a Flutter Developer Intern, demonstrating versatility and user-centered design, and actively seeking backend-focused Software Engineer or SDE roles to deliver high-performance, reliable software solutions.

### **EDUCATION**

Master of Science in Computer Science - Santa Clara University, Santa Clara, California Coursework: Machine Learning, Advanced Operating Systems, Data Structures and Algorithms

Bachelor of Technology in Information Technology - SSN College of Engineering, Chennai, India Coursework: Object Oriented Analysis and Design, Computer Architecture, Database Management System Jun 2026 Expected CGPA: 3.892/4 Aug 2014 - Apr 2018 CGPA: 7.85/10

#### **SKILLS**

Languages: Java, Python, SQL, JavaScript, C/C++, PeopleCode, HTML, CSS, .NET

Frameworks & Technologies: Spring Boot, RESTful APIs, Microservices, Flask, Angular, PS Query, PocketSphinx

Tools & Platforms: Git, Visual Studio, VS Code, Postman, Oracle SQL Developer, DBeaver, PeopleSoft App Designer, ServiceNow

Mobile Development: Flutter (Dart), Firebase

### **INTERNSHIP**

Software Developer Intern - Frugal Innovation Hub, Santa Clara, California

Apr 2025 - Present

- Designing and developing a cross-platform math learning app using Flutter with real-time bilingual support to improve accessibility and comprehension.
- Implementing modular, interactive components such as quizzes and visual tutorials, following clean architecture and reusable UI patterns.
- Optimizing performance for offline access and low-spec devices, in alignment with frugal innovation and scalability principles. Link

### **WORK EXPERIENCE**

Software Engineer - Elppa Tech Solutions, Chennai, India

May 2023 - Aug 2024

- Architected a scalable backend system using Java and Application Engine to enhance HR modules like Compensation and TalentCoach.
- Directed data synchronization between PeopleSoft and Oracle Cloud, boosting payroll accuracy to 92% and streamlining system operations.
- Engineered RESTful APIs to automate HR data transmission, reducing processing time from 2 hours to 4 minutes while achieving 98% data accuracy.

Software Engineer - MultiTech EDA Systems, Bangalore, India Feb 2023 - Apr 2023

Accelerated website load performance by up to 40% through strategic front-end refactoring and optimization.

- Enhanced user experience by resolving rendering bottlenecks and improving overall UI responsiveness.
- Software Engineer Aspire Systems, Chennai, India

Jun 2018 - Oct 2019

- Built backend logic for ImpacShield, securing payroll data for 10,000+ users and ensuring regulatory compliance.
- Built an Outlook-style email and calendar system with Office 365 API integration, improving scheduling efficiency by 35%. Link
- Created a real-time image synchronization PoC for web and mobile browsers, enabling instant cross-device access.
- Developed a lightweight face recognition PoC by integrating facial recognition APIs, achieving 90%+ accuracy in controlled test scenarios. Link

## RESEARCH EXPERIENCE AND PUBLICATION

Research Assistant - SSN College of Engineering, Chennai, India

Aug 2017 - Jun 2018

Interactive Audio Indexing and Speech Recognition Navigation Tool | Under the guidance of Dr. P. Vasuki

- Developed an audio navigation tool using PocketSphinx speech recognition, enabling timestamp-based search within tutoring videos.
- Enhanced speech-to-text accuracy and query response speed by applying **NLP** and audio signal processing techniques to optimize PocketSphinx.

# **Publication:**

Gareshma N, Dr. P. Vasuki, Preethi S. Interactive Audio Indexing and Speech Recognition-based Navigation Assist Tool for Tutoring Videos, ICSCDS, April 2022.

### **PROJECTS**

## Fake Job Posting Detection System - Link

Machine Learning | NLP | XGBoost | One-Class SVM | GloVe Embeddings

- Developed a scalable ML system to classify job postings as real or fake, mitigating risks like identity theft and fraud on job platforms.
- Achieved 97.5% accuracy and 0.845 F1-score using XGBoost, with GloVe embeddings for semantic analysis of job descriptions.
- Applied One-Class SVM for anomaly detection and contributed to improving platform safety by flagging suspicious listings.

## **Library Management System**

HTML | PHP | Oracle SQL

- Developed a web-based system for managing book inventory, lending workflows, and secure user roles for librarians and members.
- Optimized SQL queries and designed a responsive UI to improve system performance and user experience.

### **Conference Management System**

Java | Hibernate | MySQL

- Built a platform for paper submission, peer review, registration, and session scheduling using object-oriented design principles.
- Integrated role-based access control and automated email notifications to streamline communication and event operations.

## **ACHIEVEMENTS AND LEADERSHIP**

- Presented a research poster at IEEE ICCCSP-2017, SSN College of Engineering.
- Honored with the **Best Student Award** and recognized for top scores in Mathematics and Sanskrit (2013 2014).
- Served as Joint Secretary (2016 2017) and Publicity Head (2017 2018) of the IT Association, leading academic and outreach initiatives.