

ADHARSHINI K

SOFTWARE ENGINEERING | AI/ML DEVELOPER | FULL-STACK DEVELOPER | T-HUB INCUBATED INNOVATOR

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SUMMARY

Computer Science Engineering student with multi-disciplinary expertise across full-stack development, AI/ML engineering, game development, and geospatial analytics. Skilled in building scalable systems, REST API integrations, and interactive applications using Java, Python, JavaScript, and modern frameworks. Experienced in delivering end-to-end products—from architecture and UI/UX to ML pipelines and backend workflows—across healthtech, mobility, disaster management, and emerging technology domains. Strong problem-solver with a track record of rapid prototyping, cross-functional collaboration, and developing real-world, user-centered solutions.

PROFESSIONAL EXPERIENCE

Founder & Lead AI/Software Developer - Evara Innovations

Jan 2025 - Present

- Founded Evara Innovations, a multi-project initiative building AI-driven solutions in healthtech, mobility, and geospatial intelligence.
- Managed full product lifecycle (research, UI/UX, architecture, ML development, testing, deployment) using Agile methodology; delivered rapid prototypes for national innovation challenges under tight timelines.

Incubation Mentee – T-Hub Innovation Hub & WSA Audiology

Jun 2025 - Present

- Selected by T-Hub and WSA Audiology (140-year hearing technology leader) to lead AI-based hearing-health assessment development.
- Refined audiometry accuracy and user flow through clinician and domain expert collaboration; presented prototypes and architecture during structured incubation reviews.

PROJECTS

ECHO – AI-Based Hearing Health Application

- Engineered the core game-based audiometry tests in Unity, designing the interactive gameplay mechanics that form the heart of ECHO's hearing assessment logic.
- Designed and integrated backend workflows for result storage, retrieval, and automated report generation.
- Developed end-to-end application architecture including UI/UX flow, ML model evaluation, and data handling pipelines.

CoastalVision – Coastal Flood & Erosion Prediction System

- Implemented geospatial analysis using ArcGIS to model coastal hazard prediction and risk assessment.
- Developed ML models for shoreline movement tracking, flood zone mapping, and erosion risk detection.

PABRC-DT – Predictive Ride Comfort Digital Twin

- Developed predictive comfort engine integrating 7-DOF vehicle dynamics with 10-DOF human biodynamics modeling.
- Designed ML-based road profile classification and real-time comfort prediction modules.

EDUCATION

PSNA College Of Engineering And Technology

BE - Computer Science and Engineering, CGPA: 8.02

SKILLS

Programming Languages: Java, Python, JavaScript, C#

Software Engineering: Object-Oriented Programming, Data Structures & Algorithms, Agile/Scrum, System & API Design, Rapid Prototyping, Problem Solving

Web & App Development: React.js, HTML, CSS, Tailwind CSS, REST APIs, Full-Stack Architecture

AI, ML & Data Intelligence: Machine Learning, Deep Learning, TensorFlow, Scikit-Learn, Predictive Modeling, Data Preprocessing, Signal Processing, Model Evaluation

Cloud & DevOps: Google Cloud Platform (GCP), Git, GitHub, Docker, CI/CD

Geospatial Technologies: ArcGIS, Spatial Data Analysis, Geospatial Visualization

Tools & Platforms: VS Code, Unity (Game Logic), Postman, Jupyter Notebook, Figma (UI/UX)

Domain Expertise: HealthTech (Audiology), Mobility Systems, Disaster Management, Human-Centric AI, Digital Twin Engineering

ADDITIONAL INFORMATION

Soft Skills: Leadership, Communication, Problem-Solving, Cross-Functional Collaboration, Adaptability

Languages: English, Tamil

Achievements: Selected for Unity x Google Play Game Development Cohort (Top 500 India), Shortlisted for YUKTI National Innovation Challenge 2025, State-Level SpellBee Champion (National-Level Qualifier), HackXtreme 2025 Winner, Ignitia 2025 Winner