Deepanshu Pratik

WORK EXPERIENCE

Karya

Lead Accessibility Engineer [Bangalore]

April 2025 - Present

- Lead Karya's Accessibility division, setting the technical vision and mentoring engineers to build inclusive technology from the ground up.
- Architecting a user development pipeline for systematically converting new users into a skilled workforce through guided onboarding, learning modules and skill assessments over app
- Integrated the conferencer tool directly into the main app with both VoIP and telecommunication capabilities—an architectural change designed to scale conversational data collection towards a 50k hours target

Karya

Software Engineer [Bangalore]

Oct 2023 - Mar 2025

- Architected a GenAI chatbot to provide instant query resolution to workers; this work was one of the two contributing factors in securing a \$1M Google.org grant and was showcased at Google I/O 2024.
- Delivered an Android image annotation tool for Rocket Learning in record time, securing a high-value, long-term contract for the organization.
- Led a first-of-its-kind PaaS initiative with Google and the Government of India, delivering a customized version of the Karya app that enabled the collection of **200 hours of speech data**.
- Engineered a fully automated data processing, validation and submission pipeline for **Wadhwani AI**, omitting the need for any manual intervention in a year-long project.
- Managed end-to-end projects for clients including **Wadhwani AI**, **Rocket Learning**, and **Vaani CSC** (Google), establishing a track record of success that led to renewed, multi-year contracts and expanded partnerships

Karya

Software Development Engineer Intern [Remote]

Jan 2023 - Sep 2023

- Transformed Android devices into offline-first servers by porting them to a full Ubuntu OS and creating automation scripts to deploy the 'Karya Box', enabling data collection in no-internet regions and increasing organisation's reach by 6% in terms of geographic coverage.
- Built a Twilio-based **conferencer tool** to solve a data collection bottleneck, successfully capturing over **1k hours** of audio data for model training.

CCExtractor Development

- Developed "Regolith Onboarding" software to familiarize users with a keyboard-centric approach in Regolith Linux.
- Designed UI, and customizable workflows, in which we stimulate key binding sequences to promote practicing efficient keyboard usage in an interesting way.

Samsung Research

PRISM Machine Learning Intern [Remote] | Certificate

Sept 2022 - Mar 2023

• Developed a Computer Vision model for real-time 3D object prediction, optimized to run on resource-constrained Samsung mobile hardware. (Project governed by a Non-Disclosure Agreement)

Nestor Analytics

Android Developer Intern [Remote] | Certificate

Mar 2022 – May 2022

• Integrated a custom UI with the AnkiDroid open-source backend by analyzing its codebase to ensure a stable connection.

GOVERNMENT ADVISORY & MENTORSHIP

Technical Advisor

June 2024 - July 2025

Ministry of Tribal Affairs Project (Representing IIIT-NR)

Providing strategic technical direction on model selection, data pipelines, and training strategies. I mentor the university's implementation team through regular pro bono advisory sessions.

Technical Mentor Jan 2022 - June 2022

Saarth-E AI Durg (Govt. of Chhattisgarh Project) | Link

Provided technical mentorship for the creation of an AI grievance portal, resulting in a Certificate of Commendation from the supervising IAS officer.

EDUCATION

International Institute of Information Technology, Naya Raipur

Raipur, Chattisgarh

B, Tech, Computer Science

CGPA: 9.1 / 10.00

SKILLS & ACHIEVEMENTS

Languages: Python, C++, Java, JavaScript/TypeScript, Kotlin, SQL, Vala

Technologies: Git, GitHub, GCP, PostgreSQL, Firebase, Android Studio, Docker, Twilio

Frameworks: React. is, FastAPI, Jetpack Compose, TensorFlow, GTK, Sanity

Achievements:

- Awarded Indian Patent (Patent No. 473301) for Body Temperature using Smartphone
- Google Summer of Code Contributor 2023 (CCExtractor) [Link]
- Honoree, Samsung PRISM Research Program [<u>Link</u>]