

Raj Kumar Kodiraj

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Personal Profile

Creative and detail-oriented postgraduate in Advanced Computer Science with proven experience in UI/UX design, mobile app development, and AI-powered systems. Skilled in Kotlin, Python, and modern design tools like Figma and Adobe Suite. Adept at building accessible, user-centric applications through both academic and industry projects. Passionate about integrating AI and voice control in mobile gaming. Currently seeking a graduate role to contribute innovative digital solutions while continuing to grow in a collaborative tech environment.

Experience

UI/UX DESIGNER | GNANAM TECH | OCT 2023 - MAR 2024

- **Led the design and development of CRM systems**, aligning technical architecture with business objectives to enhance customer engagement and operational efficiency.
- **Contributed to integrating NFC technology solutions**, supporting innovative product development, and streamlining contactless interactions.
- **Collaborated within a startup environment**, playing a pivotal role in shaping the company's technological infrastructure and delivering scalable, user-focused solutions.

DESIGN INTERN | UNIVERSAL PLASTICS INDUSTRIES | AUG 2023 - SEP 2023

- Assisted in the design and prototyping of web and mobile applications using Figma, adhering to material design guidelines.
- Created digital assets and vector graphics, applying strong foundations in colour theory and typography.
- Supported the development of a consistent design system to ensure user-centric, visually cohesive interfaces.

UI/UX DESIGN INTERN | SEALED | JUL 2022 - SEP 2022

- **Applied core UI/UX design principles**, including colour theory, typography, and digital asset creation, to support the development of intuitive digital interfaces.
- **Utilised design tools such as Figma, Adobe Illustrator, and After Effects** for vector graphics editing and prototyping across web and mobile platforms.
- **Gained hands-on experience with design systems and material design principles**, contributing to consistent, user-centric application design.

Education

MASTER OF SCIENCE IN ADVANCED COMPUTER SCIENCE | OCT 2024 TO SEP 2025

University Of Essex, Colchester, UK

BACHELOR OF TECHNOLOGY IN INFORMATION TECHNOLOGY | AUG 2019 TO MAY 2023

Panimalar Engineering College, India

MSc Dissertation

AI-POWERED VOICE CONTROL FOR MOBILE GAMES (ONGOING)

Designing a voice-controlled mobile game using **Kotlin**, **XML**, and **Edge AI**. The project integrates fine-tuned **speech-to-text models** (DeepSpeech, Wav2Vec) with **NLP** for real-time command recognition. Uses **TensorFlow Lite/PyTorch Mobile** to enable low-latency, on-device AI, enhancing accessibility and hands-free gameplay.

Key Technical Proficiencies

- **Coding Skills:** Experience in Python and Kotlin for app development, with working knowledge of HTML, CSS, and XML.
- **Design Expertise:** Experienced in delivering intuitive user experiences with tools like Figma for prototyping, Illustrator for graphics, and After Effects for motion design.
- **Development Tools:** Familiar with Android Studio, Visual Studio, PyCharm, and GitHub for project collaboration and version control.
- **AI & Machine Learning:** Practical knowledge of CNNs and AI applications in areas like image recognition and interactive systems.

- **Professional Skills:** Clear communicator, dependable team player, and quick to adapt in fast-paced environments.

Publications

1. **Ocular Disease Detection Using Deep Learning**

Presented at the *4th International Conference on Engineering and Advancements in Technology*, June 2023.

2. **Automated Attendance System Using Face Recognition**

Presented at the *5th International Conference on Intelligent Computing (IconIC)*, March 2022.

Certifications

1. Google UX Design Certificate
2. Complete Python Developer
3. Web Development Bootcamp

Projects

EMOTION RECOGNITION USING DEEP LEARNING

Worked on a project to recognise human emotions from facial expressions using a CNN model trained on the CREMA-D dataset. I built a simple and user-friendly interface that demonstrates real-time emotion detection, with potential use cases in accessibility tools and interactive systems.

SHE CATERING – FOOD DELIVERY MOBILE APP

Designed and developed a mobile app tailored for a local catering business to manage and streamline food delivery services. The app includes features such as menu browsing, order placement, delivery tracking, and an admin dashboard for managing incoming orders. Focused on creating a clean, user-friendly interface that makes the ordering process quick and easy for customers.

AUTOMATED ATTENDANCE SYSTEM USING FACE RECOGNITION

Developed a system that captures student attendance using real-time facial recognition. It was built using Python and MySQL, replacing traditional methods with a faster and more accurate solution that also reduces manual work and paperwork.

REAL-TIME COMMUNICATION SYSTEM FOR THE SPECIALLY ABLED

Created an AI-based tool to help individuals with speech or hearing impairments communicate more easily through sign language recognition. The project focused on improving day-to-day interaction and accessibility using computer vision techniques.

OCULAR DISEASE DETECTION IN FUNDUS IMAGES

Built a deep learning model that can detect diseases like glaucoma, cataract, and diabetic retinopathy from retinal images. Using a CNN and image augmentation techniques, the model achieved promising accuracy and could assist in early diagnosis.