

# Akash

## Mobile App Developer

✉ akasharjan01@gmail.com ☎ 0333-2636352 📍 Karachi, Sindh

🌐 www.akashcodethis.com 🔗 linkedin.com/in/akash-kumar-20b722207

### Profile

---

Software Engineer with a solid understanding of application development, including frontend and backend systems. Focused on building reliable and maintainable solutions that address practical needs. Interested in solving real-world problems through technology and improving skills over time.

### Education

---

**Karachi Institute of Economics & Technology** 09/2021 – 08/2025  
*Bachelor of Computer Science* Karachi

Studied software development, algorithms, and networking with hands-on experience in academic projects and practical applications.

### Work Experience

---

**ISPR (Inter Service Public Relation)** 07/2024 – 08/2024  
*Intern*

- Conducted interviews with senior leaders (e.g., DG ISPR, Systems Limited CEO) to explore cybersecurity and digital initiatives.
- Summarized findings into 10+ executive briefings for internal use.
- Participated in strategic workshops and field visits to tech and defense facilities.
- Gained insight into public-sector IT governance and communication protocols.

### Skills

---

- |                |            |                     |              |
|----------------|------------|---------------------|--------------|
| • React Native | • Java     | • .NET              | • Networking |
| • Python       | • C#       | • Design & Analysis | • OOP        |
| • SQL          | • Power BI | • Odoo ERP          |              |

### Projects

---

**Dialogue Director (FYP)** 10/2024 – present

- Achieved **A grade** and ranked **3rd best project among 50+** in the final year showcase.
- Developed a **Python backend** for YouTube subtitle summarization, reducing manual review time by **65%**, and integrated it with a React Native app for real-time video analysis and results.
- Integrated **APIs for speaker diarization and topic segmentation**, improving transcription clarity by **40%**, while ensuring seamless communication between the frontend and backend.

- Processed **50+ videos**, demonstrating scalability, efficient topic indexing, and preparing for future sentiment analysis integration to expand use cases by **30%**.

### **ClearSight – AI Powered Vision for the Blind**

- Developed an assistive mobile app for visually impaired people using **React Native (frontend)** and **Flask (backend)**.
- Implemented **real-time object detection (YOLOv8)**, **color recognition (OpenCV)**, and **OCR-based text-to-speech** for reading printed content.
- Integrated **Whisper (OpenAI)** for voice commands, enabling hands-free navigation.
- Built an **emergency assistance system** using **Firebase + Twilio**, allowing users to send instant alerts to pre-saved contacts.
- Designed for **affordability and accessibility**, ensuring smooth performance on low-cost Android devices and compliance with **WCAG standards**.

### **Patient Medicine Alarm App**

- Created a mobile reminder app that increased medicine adherence in test users by **25%** using timely alerts.
- Achieved **95% alert accuracy** during testing on multiple Android devices.
- Reduced scheduling errors by **40%** with built-in time validation and persistent alerts.

### **Bank Management System (C#)**

- Built a banking app that handled over **200+ user accounts**, enabling secure deposits, withdrawals, and reports.
- Reduced transaction processing time by **30%** using optimized code and real-time updates.
- Implemented error handling to bring input error rate down by **80%** during simulations.

### **Client-Server Chat Application (MPI-Based)**

- Engineered a chat system with Message Passing Interface (MPI) for 100+ users, maintaining average latency under **50ms**.
- Reduced communication overhead by **45%** through efficient socket design and concurrency handling.
- Successfully simulated **multi-client load testing** across different machines using distributed architecture.

## **Certificates**

---

- Python Full Stack Development
- Speed Programming Competition
- Poster Designing Competition
- Speed Networking Competition
- Microsoft Built Portfolio using React

## Languages

---

Urdu

Sindhi

English