SANDEEP MANGLARAM

Senior Software Engineer



smanglaram@gmail.com



in http://www.linkedin.com/in/smanglaram



https://sandeepmanglaram.github.io/



https://leetcode.com/u/smanglaram/

PROFESSIONAL EXPERIENCE

Samsung Research Institute, Bangalore.

Sr. Software Engineer | Nov 2022 - Present

Samsung XR Link: VR Head Mounted Display (Moohan)

- Developed a connectivity-focused Android application for a Head Mounted Display (HMD) to enable seamless immersive gaming experience with SteamVR integration.
- Implemented data encryption using RSA and AES algorithms to ensure secure communication.
- Captured audio using AndroidXR, transmitted it via AIDL and streamed it to a server for real-time processing and delivery.

Samsung Studio (USP of Galaxy S24, S25 Series)

- Developed a multi-platform video editing app for the Samsung ecosystem, enabling cinematic movie-style montages with advanced multi-layer editing smartphones, tablets, and laptops.
- Designed and implemented the JSON parser architecture for the Auto Trim feature which generates best video compilation using Al.
- Developed UI interfaces optimized for various resolutions, including tablet, smartphones, DeX, fold, and flip modes.
- Contributed to modules such as decorators, video export, and resolved UI-related bugs.

Samsung Video Editor

- Developed modules for video split, timeline, and export.
- Performed bug fixing, debugging and implemented new features as per business requirements.

Proof of Concept, Samsung Research

- Content Adaptive Encoding: Optimized video compression through dynamic bitrate encoding using MediaCodec, leveraging SSIM for precise quality assessment to achieve significant size reduction while preserving visual integrity.
- Music Analyzer: API that processes audio files to extract key beats timestamps & identify key frames for applying seamless transitions between media content.

■ Infosys, Hyderabad

Senior System Engineer | Nov 2020 - Nov 2022

- Developed a corporate employee app for managing timesheets, leave, cab bookings, events, and HR services.
- Implemented AIDL, JSON parsing, Unit testing, UI/UX.
- Performed Debugging, Profiling and Analytics to fix bug and crash fix and memory leaks,

EDUCATION

Bachelor of Engineering,

Computer Science

2016-2020

Walchand Institute of Technology,

Solapur

GPA: 9.02

TECH STACK

Concepts

- Data Structures & Algorithms
- Object-Oriented Programming System
- Database Management System

Language

- Java
- Python
- Kotlin

Android Framework

- Android SDK Android XR
 - Services
- AIDL JSON
- TCP/IP socket
- LiveData
- Coroutine
- UI/UX
- Mockito
- ViewModel
- MediaCodec

UI Design: XML, Jetpack Compose

Database : SQL, Room DB

Web : Html, CSS, JavaScript

ACHIEVEMENTS

- Samsung Certified SWC Professional.
- Infosys Certified Software

Programmer. A



- Mentoring Junior Developers for SWC Professional Certification.
- Presenter at TechGlanz 2023 Tech Event representing Studio App.

LANGUAGES

- English
- Hindi
- Telugu
- Marathi