

MAHESH SHARMA

Chief Technology Officer | Full-Stack Architect | Technology Consultant

📍 Mathura, Uttar Pradesh, India | 📩 maheshsharma184@gmail.com
📞 +91 7838053261 | 💼 [LinkedIn](#)

EXECUTIVE SUMMARY

Results-driven technology leader with **10 years of progressive experience** from Unity Developer to Chief Technology Officer. Proven track record of architecting and scaling AI-powered EdTech platforms serving **50,000+ active users** with 99.9% uptime. Expert in full-stack development, cloud architecture, and team leadership with deep specialization in Unity3D, VR/AR, and interactive learning systems.

Currently Available For: Full-time CTO/Engineering Leadership roles | Fractional CTO engagements | Technology consulting | Strategic advisory

LEADERSHIP & TECHNOLOGY EXPERTISE

Strategic Leadership

Technology Strategy & Roadmap | Product Architecture | Team Building & Mentorship | Agile/Scrum | Stakeholder Management | Budget & Resource Planning | Vendor Management

Technical Architecture

Microservices Architecture | Cloud-Native Systems | Serverless Computing | System Scalability | API Design | Database Design | Security Architecture | DevOps & CI/CD

Core Technology Stack

Languages: JavaScript, C#, Python, Java, C++

Frontend: React.js, Next.js, Tailwind CSS

Backend: Node.js, Express.js, Python, REST APIs, GraphQL

Mobile: React Native, Android (Kotlin), iOS (Swift), Unity3D

Game/3D: Unity3D, C#, VR/AR (Oculus, HTC Vive, ARKit, ARCore)

Databases: MongoDB, PostgreSQL, MySQL, Redis, Elasticsearch, DynamoDB

Cloud: AWS (Lambda, ECS, DynamoDB), Google Cloud, Firebase

DevOps: Docker, Kubernetes, Terraform, Jenkins, GitHub Actions

AI/ML: TensorFlow, PyTorch, Scikit-learn, Personalization Systems

PROFESSIONAL EXPERIENCE

Chief Technology Officer

STEPapp | Mumbai, India | Mar 2022 – Present

Lead all technology strategy, product architecture, and engineering operations for a high-growth EdTech SaaS platform serving 50,000+ active learners globally.

Strategic Impact:

- Scaled platform from 10,000 to **50,000+ concurrent users** while maintaining 99.9% uptime
- Reduced infrastructure costs by **40%** through serverless architecture and intelligent caching
- Improved user engagement by **35%** via AI-driven personalization and gamification
- Led company through critical growth phase supporting expansion into multiple markets

Technology Leadership:

- Architected end-to-end **AI-powered learning platform** with adaptive content delivery, personalized learning paths, and real-time performance analytics
- Built scalable infrastructure using **MERN stack, Redis, Elasticsearch, Firebase, and AWS Lambda** handling thousands of concurrent users
- Designed and implemented **serverless event-driven architecture** with AWS Lambda and job queues optimizing performance and cost
- Led mobile app development (Android/iOS) using **React Native and Unity3D** achieving seamless cross-platform experience
- Integrated **AI/ML models** for intelligent recommendations, content personalization, and predictive analytics
- Developed **interactive AR/VR learning modules** in Unity3D significantly enhancing student engagement

Team & Process:

- Built and mentored high-performing engineering team across full-stack, mobile, and game development
- Established DevOps culture with automated CI/CD pipelines, monitoring, and security best practices
- Implemented agile methodologies reducing sprint cycles and improving delivery velocity
- Collaborated cross-functionally with product, design, and business teams aligning technology with strategic goals

Technologies: React.js, Node.js, MongoDB, Redis, Elasticsearch, AWS Lambda, Firebase, Unity3D, React Native, AI/ML, Serverless Architecture

Director of Engineering

STEPapp | Mumbai, India | Jan 2020 – Mar 2022

Led technology transformation initiatives, managed full-stack engineering teams, and built foundational infrastructure supporting company's evolution from startup to scale-up.

Key Achievements:

- Successfully delivered **5+ production-grade EdTech platforms** from concept to launch
- Scaled engineering team from **5 to 15+ engineers**, establishing hiring processes and technical culture
- Built robust backend infrastructure using **Node.js, MongoDB, Redis, AWS** ensuring high reliability and performance
- Implemented **cloud-native solutions** using AWS Lambda and Firebase enabling rapid iteration
- Introduced **AI/ML pipelines** for data analytics and adaptive learning capabilities
- Reduced time-to-market by **40%** through standardized development processes and CI/CD automation
- Scaled systems to support **10,000+ concurrent users** with low-latency performance

Technologies: MERN Stack, AWS, Firebase, Redis, Elasticsearch, Unity3D, React Native, AI/ML, CI/CD

Head of Unity3D & Game Development

STEPapp | Mumbai, India | Sep 2018 – Jan 2020

Led game development team creating gamified learning experiences and interactive educational content driving significant user engagement improvements.

Key Achievements:

- Increased student engagement by **40%** through innovative gamified learning modules
- Led team of **8+ Unity3D developers**, establishing technical standards and best practices
- Designed and developed interactive learning applications using **Unity3D** aligned with educational objectives
- Integrated mobile games with backend systems using **MERN Stack, Firebase, and REST APIs**
- Implemented scalable architecture handling **thousands of concurrent learners** across iOS and Android
- Collaborated with AI/ML engineers incorporating adaptive learning features into gamified experiences

Technologies: Unity3D, C#, Firebase, React Native, Node.js, MongoDB, Redis, Mobile Development

Senior Unity Developer

Quytech | Gurugram, India | Sep 2017 – Sep 2018

Developed complex VR experiences and multiplayer gaming solutions for enterprise and consumer markets.

Key Projects:

- **VR Industrial Walkthrough Modules** for Fortune 500 clients improving training efficiency
- **Multiplayer Teen Patti Game** achieving **50,000+ users** and **4.7+ app store rating**
- Built scalable backends using **Firebase and cloud functions** for multiplayer synchronization
- Integrated monetization systems including **Google IAP and ads mediation**
- Optimized experiences across **Oculus, HTC Vive, and mobile VR platforms**

Technologies: Unity3D, VR (Oculus, HTC Vive), Firebase, Multiplayer Architecture, Google IAP

Senior Unity Developer (AR/VR Specialist)

Veative Labs | Noida, India | Jul 2015 – Sep 2017

Developed immersive VR educational simulations combining interactive learning and real-world scenario training.

Key Achievements:

- Created **15+ VR educational modules** serving **100,000+ students** across institutions
- Improved learning retention by **45%** through immersive VR experiences vs traditional methods
- Designed VR simulations for science, mathematics, and vocational training
- Optimized experiences for **Oculus Rift, HTC Vive, and Mobile VR**
- Collaborated with educators ensuring content alignment with learning objectives

Technologies: Unity3D, VR (Oculus, HTC Vive), Firebase, ARKit, ARCore, Educational Technology

CONSULTING & FREELANCING EXPERIENCE

Fractional CTO

BoredLeaders Pvt. Ltd. | Delhi, India | Jan 2022 – Apr 2023

Led complete product development of lightweight multiplayer Mahabharata-themed mobile game from concept to launch.

Deliverables:

- Developed engaging **multiplayer game in Unity3D** with optimized performance
- Architected lightweight system with fast loading and minimal resource consumption
- Integrated **Firebase backend** for real-time multiplayer, authentication, and analytics
- Implemented monetization via **Google IAP and ads mediation**
- Managed end-to-end product lifecycle including deployment and maintenance
- Ensured smooth gameplay supporting **thousands of concurrent players**

Technologies: Unity3D, Firebase, Real-Time Multiplayer, Google IAP, Ads Mediation

Consulting CTO

KITMEK Technologies Pvt Ltd. | Pune, India | Oct 2021 – Feb 2022

Provided strategic technical leadership for kids' metaverse learning platform combining gamification and scalable cloud architecture.

Deliverables:

- Led development strategy for educational **metaverse game using Unity3D**
- Built mobile-optimized client for smooth performance on Android and iOS
- Integrated **Firebase backend** for authentication, storage, and real-time interactions
- Implemented monetization and **analytics tracking** engagement metrics
- Advised on scalable architecture design and EdTech best practices
- Enabled faster product launch with optimized infrastructure

Technologies: Unity3D, Firebase, Google IAP, Mobile Development, Analytics

NOTABLE PROJECTS & IMPACT

STEPapp Ecosystem (Current)

- AI-powered learning platform: 50,000+ active users, 99.9% uptime
- Cross-platform mobile apps (Android/iOS)
- AR-based interactive learning modules
- Real-time performance analytics dashboard

VR/AR Solutions

- Industrial training modules for Fortune 500 companies
- Educational VR simulations: 100,000+ student users
- 45% improvement in learning retention vs traditional methods

Gaming & Entertainment

- Multiplayer Teen Patti: 50,000+ users, 4.7+ rating
- Mahabharata multiplayer game (BoredLeaders)
- Kids' metaverse platform (KITMEK)

EDUCATION & CERTIFICATIONS

Bachelor of Technology (B.Tech) in Computer Science

Rajkiya Engineering College, Banda | 75% | 2015

Professional Training:

- C & Data Structure Training | Infosys | 75%
- Java Programming | NIIT | 82%
- 3000+ Programming Code Training | Trisect Institute
- Design & Analysis of Algorithms | NIIT

Achievements:

- Employee of the Year (2019, 2020, 2021)
- 99.9 Percentile | AMCAT Aptitude Assessment
- 87% | Data Structure Proficiency
- 90% | E-Litmus Mathematical Ability

PROJECT PORTFOLIO

Video Demos:

- STEPapp: youtube.com/watch?v=ESVBAewB_OE
 - BoredLeaders: youtube.com/watch?v=yX92sEeh53k
 - KITMEK: youtube.com/watch?v=7zWjZlnWNT4
 - Quytech: youtube.com/watch?v=aQyH7CQPVcA
 - Veative: youtube.com/watch?v=iaRME8u-itY
-

AVAILABILITY & ENGAGEMENT TYPES

Open For:

- **Full-Time Roles:** CTO | VP/Director of Engineering | Head of Technology
- **Consulting:** Fractional CTO | Technology Strategy & Architecture | AI/ML Integration
- **Freelance:** Product Development | Mobile Apps | Unity3D/VR/AR | Cloud Architecture
- **Advisory:** Technical Due Diligence | Startup Mentorship | EdTech Solutions

Status: Actively exploring opportunities | Immediate availability for consulting | Flexible for full-time roles

Declaration: I declare that the information provided above is true and correct to the best of my knowledge.

Location: Mathura, Uttar Pradesh, India | **Date:** December 2024