Software Architect

Deepan Karthegeyen A

PROFESSIONAL SUMMARY

Software Architect with **14+ years** of experience in designing scalable, cloud-native, and offline-first systems. Skilled in distributed architectures, cross-functional leadership, and delivering cost-effective enterprise solutions. Currently exploring **GenAl**, **Agentic Al** driving innovation in modern platforms.

EXPERIENCE

Technical Lead, Infoservices India, Chennai

November 2024 - Now

Architected and delivered **offline-first architecture** using .**NET Core**, **PostgreSQL**, **PowerSync**, and **AWS DMS**, ensuring resilient sync.

Designed scalable .NET Web API integrated with React frontend.

Led development of InterviewIQ, a Generative Al-based interview platform using Python, WebRTC, GPT-4o, DynamoDB, Cognito, Lambda, and S3.

Lead II Software Engineering, UST Global, Chennai

September 2021 - November 2024

Architected and led the development of scalable solutions using .NET Core, Angular, SQL, Azure CI CD and DevOps

Developed and implemented distinct **Microservices** to support each **Angular Micro-Frontend**. Led cross-functional teams in agile sprints, improving delivery

Lead Application Developer, ADP India, Chennai

June 2017 - August 2021

Directed the development of full-stack applications with .NET Core, Angular, SQL and AWS. Managed implementations across multiple countries including regions such as Southeast Asia (SEA) and Asia-Pacific (APAC).

Implemented Fedlet SSO for secure user authentication using Single Sign-On.

Senior Software Engineer, ADP India, Chennai

November 2011 - May 2017

Led a team of developers to design and implement a new development in ASP.NET Web Forms application into a modern Angular front-end with **.NET Core** back-end architecture.

Conducted regular code reviews to ensure high-quality standards and unit testing and mentored team on delivery of modules.



CONTACT

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(Chennai

SKILLS

Problem Solving Expert

API Development Expert

System Design Skillful

Cloud Computing Experienced

LINKS

(in) deepankarthegeyen

LANGUAGES

- Tamil
- English

Information Systems Trainee, Indian Oil Corporation, Chennai

March 2010 - February 2011

Converted Intranet Classic ASP, DHTML Web application to **ASP.NET C# Web Form** application.

EDUCATION

B.E. Computer Science and Engineering, Anna University, Chennai

2005 - 2009

PROJECTS

Offline-First Data Sync Solution with PowerSync, PostgreSQL & AWS

November 2024 -

Architected and implemented an **offline-first data sync system** using **Power Sync-**, **PostgreSQL**, **AWS DMS**, Mobile App using **React Native** ensuring seamless connectivity.

Designed bi-directional sync strategies and local storage schema, enabling resilient mobile/web experiences with real-time replication to **AWS RDS**.

InterviewIQ - AI-Powered Interview Platform

Developed a GenAl interview assistant using **Python**, **WebRTC**, **OpenAl GPT-4o**, and **.NET APIs**, deployed via **Lambda** and **DynamoDB**.

Enabled real-time STT/TTS voice interaction and video recording with cheat detection via client-side streaming.

Used **Cognito** for secure identity, **S3** for file storage, and **React/Next.js** as the front end.

Tires Modernization | Retail | US & Canada

June 2022 - Now

Architected and led a team of 11 engineers to modernize legacy AS400 systems into a scalable solution using .NET 8, Angular 14, MS SQL, and CosmosDB.

Developed and maintained **Angular micro-frontend applications** with corresponding .**NET-based microservices**, orchestrated using **Single-SPA**.

Oversaw development workflows, conducted code reviews, mentored junior developers, and authored **HLD/LLD** ensure consistent delivery and code quality.

Employee Self Service | HCM | India, SEA & APAC

November 2011 - August 2021

Led the modernization of HR modules (Flexi, Leave, IDP, Rewards & Exit) across APAC by transforming a monolithic system into a **Modular Monolith**, improving scalability and maintainability.

Integrated **Elasticsearch** for real-time search and analytics, and implemented infrastructure optimizations including **ELB sticky sessions**, **HAProxy**, **NAS storage**, and **DB replication**.

Conducted code reviews and enforced automated unit testing standards using **nUnit** for .NET and **Jasmine** for Angular.