

Ashik Salim

SOFTWARE ENGINEER

☎ (+91) 999 522 8803 | ✉ ashikns@gmail.com | 🔗 linkedin.com/in/ashikns

Summary

Software engineer across multiple domains for 9 years, with a prime focus on Microsoft technologies - Mixed Reality, Azure, Azure OpenAI, ASP.Net Core, UWP, WPF. Worked on multiple applications developed for HoloLens in Unity3D, multiple of them showcased internationally. Recently diversified to gain experience in generative AI based on LLMs.

Work Experience

Reply Valorem

Kerala, India

SOFTWARE ENGINEER

September 2014 - Present

- **HoloBeam**: 3D Telepresence application that captures color and depth information from Kinect, transmits it over the internet and recreates it as a point cloud in HoloLens.
 - Developed native plugin for Unity3D written in C++ to enable hardware accelerated video decoding and transport over WebRTC.
 - Developed a custom codec for encoding and transmission of depth data over a traditional H.264 video stream.
- **HoloFlight**: 3D Real-time flight data tracking and visualization on HoloLens, developed in Unity.
 - Developed a system to parse, filter and store flight position data and represent this using 3D objects viewable in Mixed Reality.
 - Developed a real-time procedural terrain mesh generator using Bing/Google maps api, combining both satellite image overlay and height maps.
- **Azure Spatial Anchors Showcase**: Android/iOS application that allows users to load 3D models and place them in real world to demonstrate the capabilities of Azure Spatial Anchors by Microsoft, developed in Unity.
 - Developed multi-user synchronized object manipulation module based on SignalR.
 - Automatic 3D model sharing among the users in a session using cloud storage as backend.
- **NLP based on Generative AI**: Multiple projects for Microsoft that showcase how to use GPT based models, all open sourced by Microsoft.
 - Multiple projects that used OpenAI GPT models to create virtual assistants for content generation, focused towards non-profits.
 - Developed a document analysis accelerator that used a chain of LLM functions based on different GPT models.
 - Developed several POCs that use Azure Cognitive Speech, Azure Cognitive Search, Azure Communication Services.
- **XPresent**: Rich content presentation application which enables users to present interactive elements such as 3D models and real-time on-screen drawing.
 - Converted hand recognition model from Mediapipe by Google into ONNX, enabling native inference on UWP via WinML.

Education

Bachelor of Technology in Computer Science

Kerala, India

GOVT. MODEL ENGINEERING COLLEGE

May 2010 - April 2014

Recognitions

HoloFlight, Showcased at Unite India 2017

November 2017

HoloBeam, Showcased at CES 2018 by invitation from Microsoft

January 2018

HoloBeam, Presented at keynote of Inspire 2018 by Satya Nadella

July 2018

HoloFlight, Presented at NASTech 2022

December 2022

Certifications

Microsoft Certified: Azure AI Engineer Associate, Microsoft

March 2023

Microsoft Certified: Azure Data Fundamentals, Microsoft

January 2023

Improving Deep Neural Networks, Coursera

January 2020

Neural Networks and Deep Learning, Coursera

December 2019