

ASHUTOSH GUPTA

Summary: Creative technologist with 4+ years of hands-on experience engineering immersive, intelligent, and scalable solutions across full-stack, cloud, and XR ecosystems. From architecting GPT-powered financial insights to reviving ancient history in VR, I code with creativity. Proficient in C#, Python, .NET Core, React, and AWS, building robust APIs, intuitive UI, and backend systems.

SKILLS

Programming Languages : C#, Java, Python, TypeScript, JavaScript, C.
Web Development : HTML, CSS, Angular, React, .Net 6/7/8, Asp.Net Core, Django, Flask, jQuery, NodeJS, Unity3D, Hangfire.
Database : SQL Server, MySQL, MongoDB, DynamoDB, PostgreSQL, SQLite, GitLab
Cloud & DevOps : AWS (EC2, RDS, S3, API Gateway, Lambda), Azure, Docker, Kubernetes, Serverless Framework, CI/CD, Jenkins, Octopus, GitHub, BitBucket, SourceTree, Confluence, Jira
Other Technologies : OpenAI, Kafka, Shell script, Selenium, Beautiful Soup, Web Scraping, Automation, Git, Blender, Cascaduer
Concepts : Agile Scrum Methodology, Object-Oriented Methodology, Database Design, Data Structures and Algorithms, Artificial Intelligence and Machine Learning, SDLC

RESEASRCH

Reconstructing History: AR/VR App for Historical Structures | *MantraPoynt Inc.* May 2024 - Aug 2024

- Built an **immersive VR experience in Unity3D** to explore ancient sites in their original form, featuring **AI-powered NPC tour guides**.
- Integrated **speech-to-text using OpenAI Whisper**, **text-to-speech via Speechify**, and dialogue generation through **Groq-hosted LLMs** for real-time interactions.
- Modeled historically accurate structures with Blender, collaborating with **archaeologists for validation**.
- Enabled real-time time-state transitions using custom shader blending, and optimized performance with LOD and occlusion culling.

WORK EXPERIENCE

Full Stack Developer | *MantraPoynt Inc.* Aug 2024 – Till date

(.Net 8, OpenAI GPT, ASP.NET, Agility, JWT, React.js, Material-UI, Docker, SQL Server)

- Solely developed **Finance GPT**, with 20+ RESTful APIs with **ASP.NET Core, Entity Framework, Identity & JWT authentication**, using **LINQ** for efficient data retrieval and **GPT-powered LLMs** for predictive analytics.
- Leveraged **OpenAI GPT models** with **domain-specific prompt engineering** and **embedding-based retrieval**, analyzing 50000+ stock entries to generate high-accuracy **time series forecasts and NLP-driven** market summaries.
- Designed a **responsive React.js interface** with **Material-UI**, achieving a 95% satisfaction rate.
- Containerized models with **Docker**, deployed to **AWS using CI/CD** pipelines for scalable.

Software Engineer | *HHAeXchange*

Dec 2020 - Jul 2023

(Agile methodology, C# .NET, Angular, JavaScript, Kafka, SQLServer, PostgreSQL, AWS)

Gujarat, India

- Secured 100% of passwords by **implementing AWS Secret Manager** in a healthcare application.
- Crafted **20+ .NET Core 6.0 REST APIs** utilizing **CDC** to sync data between servers with **SQL queries** and **mediator design pattern**.
- Designed and developed **ASP.NET Core Razor View pages** for dynamic and interactive UI.
- Integrated **Datadog APM to monitor API** performance and improving anomaly detection.
- Single-handedly re-architecture the **remittance jobs in SSIS packages** and reducing file processing time by 96%.
- Engineered a high-performance **Kafka Consumer in .NET Core 3.0**, processing 32,000 billing requests per ms.
- Refactored **Angular-based front-end components**, reducing page load times by 40%.
- Built reusable **Angular directives and services** to improve code modularity and maintainability across components.
- **Mentored 3 interns**, led knowledge-sharing **meetings**, and received **Best Employee Award**.

Software Engineer | *AtliQ Technologies*

May 2020 - Jul 2020

(Python, SQL, AngularJS, AWS S3 Storage, Leadership, Startup)

Gujarat, India

- Led an end-to-end **AngularJS** with **SQLServer stored procedures** project in a **startup environment**, with 95% satisfaction.
- Upgraded **Python scripts to integrate AWS S3** with Angular, enhancing data accessibility.

PROJECTS

Escape- Stealth Survival Game | Unity, Unity3D, C#, AI, NavMesh

- Developed a **thrilling stealth-based survival game in Unity**, implementing **AI-driven zombie behavior** using **NavMesh** for patrolling, chasing, and attack mechanics
- Engineered core gameplay systems in **C#**, including player movement, **AI interaction**, event-driven objectives, and **physics-based animations**.

MASala AI — Multi-Agent Recipe Assistant | Python, FastAPI, React.js, CrewAI, Gemini, AI, ML

- Built a full-stack web app using FastAPI and React.js, with Tailwind CSS, creating a real-time dashboard and backend system for best recipes.
- Developed a Multi-Agent AI system using CrewAI and Google Gemini with Python to generate personalized recipes, adapting to user ingredients, dietary restrictions, and allergies.
- Orchestrated and integrated AI agents (Analyzer, Nutritionist, Chef, Presenter) into a seamless pipeline, creating personalized meal plans.

StudentSmartRentals | MongoDB, React, Node.js, Express, Agile, Firebase, GitHub

- Reduced average property search times by 50% through **strategic MERN stack integration**. Incorporated **Firebase authentication**, boosting trust scores by 25% and simplifying real-time data sync.
- Enhanced listing procedures via an **interactive property map and multimedia previews**, adding essential moving services to achieve a 20% surge in user engagement.

PicProcure | Django, Python, JavaScript, Azure, MongoDB, Bootstrap, CSS

- Originated during festival season to automate photo sorting, PicProcure delivers relevant images to each user seamlessly, enabling efficient, **AI-driven content discovery**.
- Implemented a **Chinese Whispers clustering algorithm in Django**, leveraging **Azure Blob** for secure image hosting and achieving 97% clustering accuracy.

Training and Placement cell | C#, .Net, MySQL, Bootstrap5

- Developed a **centralized placement portal**, streamlining 70% of hiring and still in active **use by the university**.
- Crafted user-friendly features in **.Net and MySQL** for placement announcements and easy student enrollment, enhancing

3D Modeling Portfolio | Blender, Plasticity, Cycles, Eevee, Hard-Surface Modeling, Texturing

- Designed and developed **high-quality 3D models using Blender and Plasticity**, showcasing detailed hard-surface modeling, sculpting, and texturing techniques across multiple projects.
- Rendered realistic **visualizations with Cycles and Eevee**, implementing advanced material setups like glass refraction, emission shaders, and hand-painted textures to achieve cinematic-quality renders.

PandoraBox: Music Player and Playlist Management System | C#, .NET Framework,WCF, MS-SQL

- Developed a feature-rich **desktop music player in C# using Windows Forms**, allowing users to play, manage, and organize songs with playlist creation, favorites, and filtering by genre, artist, or album.
- Implemented **AX Windows Media** Player for seamless playback, integrated **MS-SQL Server** for secure song storage, and designed a **Filter Design Pattern** for advanced song search and categorization.

ACHIEVEMENTS

- Received **Best Employee Award** among **850+ employees** at HHAeXchange.
- Earned **Health Insurance Portability and Accountability Act (HIPAA)** certification.
- Recognized with **Luddy Academic Excellence Award, Certificate of Academic Excellence, Certificate of Excellence in Leadership** at Indiana University for **4.0 GPA** and Leadership.
- **Machine Learning** Course Certification

EDUCATION

Master of Science in Computer Science | GPA: 4.0/4.0

Indiana University Bloomington

Indiana, USA

Courses: Applied Algorithms, Elements of Artificial Intelligence, Applied Machine Learning, Artifisial Life in Virtual Reality, System and Security Protocol, Computer Networks, Creating Virtual Assets, Data Visualization with Tableau.

Bachelor of Technology in Computer Engineering | GPA: 9.16/10.0

Dharmsinh Desai University

India

Courses: Software Engineering, Data Structures and Algorithms, Database Management Systems, Theory of Computation, Computer Architecture, Web Development.