

ASHUTOSH GUPTA

+1-930-333-4268 guptashu562000@gmail.com ashutoshg05 ashu05g https://ashutoshgupta05.vercel.app/

EDUCATION

Master of Science in Computer Science | Indiana University-Bloomington, USA | GPA: 4/4 |  August 2023 – May 2025
Bachelor's in Computer Engineering | Darmsinh Desai University, India | GPA: 3.6/4 |  July 2017 – May 2021

TECHNICAL SKILLS

Languages: Python, Java, C#, C, SQL, JavaScript, HTTP, HTML, CSS.
Web Technologies: Django, .Net, React, Angular, jQuery, Bootstrap, SSIS, NodeJS, Google Closure, Unity3D.
Database: SQLServer, MySQL, MongoDB, PostgreSQL, DynamoDB.
Tools: Blender, Cascader, Git, Visual Studio, Postman, Hangfire, Anaconda, Jupyter, DBeaver, SourceTree.
Other: OpenAI, Kafka, Jira, Jenkins, Swagger, Octopus, teamCity, Azure, AWS, BitBucket, Confluence, Shell script
Certifications: Health Insurance Portability and Accountability Act (HIPAA) Awareness, Machine Learning Course

EXPERIENCE

Graduate Teaching Assistant August 2024 – Present
Indiana University Bloomington | Applied Algorithms, Software Engineering, Artificial Life in Virtual Reality Bloomington, USA

- Led labs and office hours for Applied Algorithms, Software Engineering, and Artificial Life in Virtual Reality courses, providing in-depth guidance on **advanced data structures with Python, programming, and Unity3D** for VR applications
- Developed assignments and projects on software engineering principles, advanced Unity scripting and VR interaction techniques.

Full Stack Intern (Sole Owner of Project) June 2024 – August 2024
Adanto Software | .Net 8, OpenAI GPT, ASP.NET Identity, JWT, React.js, Material-UI, Docker, SQL Server Idaho, USA

- Solely designed and implemented **Asset Advisor GPT**, with 20+ RESTful APIs with **ASP.NET Core, Identity & JWT authentication** to support 1,000+ users, powering real-time investment data retrieval for portfolio management.
- Integrated OpenAI GPT models** tailored to financial data, processing 50,000+ stock entries and improving predictive accuracy by 90%, delivering highly personalized, AI-driven trading insights.
- Created a **responsive React.js interface** with Material-UI and Tailwind CSS, achieving a 95% satisfaction rate.

Software Engineer December 2020 – July 2023
HHAExchange | Agile methodology, C# .NET, Angular, JavaScript, Kafka, SQLServer, PostgreSQL, AWS Ahmedabad, India


- Enhanced **health care application security** by implementing **AWS Secret Managers** which **secured 100%** of the passwords
- During platform modernization, I crafted **10+ .NET Core 6.0 REST APIs** utilizing **CDC to seamlessly synchronize data between servers** with a **mediator design pattern**, achieving rapid synchronization of **75k+ records per ms.**
- 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%.
- Participated in **Hackathon**, developing a **DynamoDB-powered searchable tag model**, improving search efficiency by 82%, using **DynamoDB and AWS Lambda**.
- Conducted in knowledge-sharing meetings and **mentored 3 interns under me.**

RESEARCH


Reconstructing History: AR/VR App for Historical Structures | Indiana University Bloomington February 2024 - April 2024

- Developed an innovative **VR platform in Unity3D using C#**, tailored for modern VR headsets like Meta Quest and HTC Vive, enabling immersive reconstructions of historical sites.
- Designed **high-fidelity 3D models** using Blender and AI-assisted photogrammetry, collaborating with archaeologists to ensure historically accurate reconstructions.
- Implemented an interactive **time-state toggle feature** in VR, allowing users to explore both current ruins and their reconstructed versions seamlessly.

PROJECTS

Escape - Stealth Survival Game | Unity, Unity3D, C#, AI, NavMesh  February 2024 - April 2024

- Developed a thrilling **stealth-based survival game in Unity**, implementing **AI-driven zombie behavior using NavMesh** for patrolling, chasing, and attack mechanics, enhancing gameplay realism and engagement.
- Engineered core **gameplay systems in C#**, including player movement, **AI interaction**, event-driven objectives, and physics-based animations, **optimizing performance** and ensuring seamless integration within **Unity's game engine**.

StudentSmartRentals | MongoDB, React, Node.js, Express, Agile, Firebase, GitHub  September 2023 - December 2023

- 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 by 35% 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, HTML  June 2020 - August 2020

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