Uday Turakhia

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EDUCATION

- **Stony Brook University - SUNY** — Stony Brook, NY
  Bachelor of Computer Science Honors Program; GPA: 3.89/4.0 — *Expected May 2025*
  Courses: *Object-Oriented Programming, Discrete Mathematics, Data Structure and Algorithms, Systems Fundamentals I, Programming Abstractions, Theory of Computation, Probability and Statistics, Finite Mathematical Structures, Linear Algebra*

SKILLS SUMMARY

- **Languages**   Python,C, C++, C#, JAVA, JavaScript, , React, Node.js, SQL, MongoDB
- **Tools**   Unreal Game Engine, Unity, Blender, ZBrush, MS Office, Adobe Photoshop
- **Soft Skills**   Leadership, Writing, Public Speaking, Time Management, Teamwork, Attention to Detail

EXPERIENCE

- **WebGen (Vertically Integrated Project)** — Stony Brook, NY
  Team Member — *August 2023 - Present*
  - Developed 5 nimble Web Applications using JavaScript for exploring biomedical Big Data from repositories like Genomic Data Commons and National Covid Cohort Collaborative.
  - Implemented caching mechanisms in the main website, reducing API load by 70% and significantly improving the overall user experience by providing faster data retrieval and response times.
  - Analyzed data related to cancer genomics and electronic health records, contributing to precision medicine insights.

- **Asopalav Creations Private Limited** — Gujarat, India
  Back-end Developer Intern — *May 2023 - August 2023*
  - Developed a sophisticated automated data entry system using Python, reducing manual data entry time by 50%.
  - Designed and implemented a deletion algorithm, streamlining the process of removing shirts from the database and resulting in a 40% efficiency improvement.
  - Collaborated with cross-functional teams to analyze and optimize back-end processes, resulting in a 20% decrease in errors and improved overall accuracy of shirt inventory management.

- **Potenza Global Solutions Private Limited** — Gujarat, India
  Full Stack Web Developer Intern — *May 2021 - August 2021*
  - Deployed dynamic e-commerce applications for five clients as a Full Stack Web Developer, utilizing JavaScript, Node.js, React, and MongoDB, resulting in a 15% reduction in time-to-market and a 20% increase in online sales.
  - Conducted user testing and provided tailored, custom solutions, leading to a notable 10% increase in customer satisfaction.

PROJECTS

- **Black Scholes Neural Network:** This innovative project merges financial analytics and artificial intelligence, applying neural network techniques to the Black-Scholes model for option pricing. The neural network enhances the model's ability to predict option prices with increased accuracy, catering to the dynamic needs of modern financial markets Tech: Jupyter Notebook and Python. (August 2023 - October 2023)

- **The Monkey King(Independent action game development):** An action role-playing game using free Paragon assets. I designed and developed different abilities and created multiple different AI for the game Tech: Unreal Game Engine, Blueprints, C++, Blender, (January 2022 - May 2022)

- **Autumn - A Virtual Assistant for Students:** A Virtual Assistant AI similar to Alexa and Siri but majorly for students to help them study. It can perform complicated mathematical operations, and web scrap information through trusted sources. It also had the ability to recognize voices and hold up conversations. Tech: Python. (November 2021 - December 2021)

- **Star Wars Game:** Developed a sword-action game inspired by Star Wars. The game included mechanics destructible environment, and stormtrooper AI Tech: Unreal Game Engine, Blueprints, C++, Blender. (October 2021 - November 2021)

- **First Person Shooter Game:** Developed a 3d first-person shooter game. The game included functionalities like basic movement, shooting, reloading, aim down sight, scopes, grenades, flashbang, smoke grenades, and zombie artificial intelligence. Tech: Unreal Game Engine, Blueprints, C++, Blender. (August 2021 - September 2021)

ACTIVITIES

- **Game Development And Design Club** — Stony Brook, NY
  Secretary — *October 2023 - Present*
  - Teaching other students about game development and its process. Specifically Unreal Engine
  - Hosted 4 different game development competitions with more than 100 participants

- **Table Tennis Club** — Stony Brook, NY
  Event Coordinator — *August 2023 - Present*
  - Hosting several intramural and residential table tennis tournaments in the university