Anshumaan (Manas) Singh

+1 (934)-219-4495 | Stony Brook, NY | anshumaanvsingh@gmail.com

linkedin.com/in/anshumaan-singh-4a9750286 | Web Portfolio: krosskinetic.github.io | GitHub: github.com/KrossKinetic

---

EDUCATION

Stony Brook University, Stony Brook, NY   *May 2023 - May 2027 (Anticipated)*

Bachelor of Science in Computer Science

CGPA: 4.0

Honors: University Scholars; University Honors Fellowship; Dean's List 2023-2024;

Awards: YouAreWelcomeHere and Global Excellence Scholarship

Programming Languages: Python, Java, HTML, CSS, JavaScript, MySQL

Relevant Coursework: CSE 114: Introduction to Object-Oriented Programming, CSE214 (WIP): Data Structures, CSE215 (WIP): Foundations of Computer Science, AMS210: Applied Linear Algebra, AMS310: Probability and Statistics, AMS161: Calculus II

Certifications (DeepLearning.AI): PreTraining LLMs by Upstage and Specialization in Machine Learning Course by Stanford.

PROFESSIONAL WORK EXPERIENCE

SBU iGEM 2024 Synthetic Biology Research   **Stony Brook, NY**

Dry Lab Researcher & Wiki Team Leader   *January 2024 – Present*

- Performed computational biology & developed miRNA–Detector Bacteria system for Human Non-Hodgkin's B-Cell Lymphoma.
- Applied Molecular Dynamic Simulations using GROMACS, CHARMM36, AlphaFold3 and AutoDock to assess the binding of AGO2 and miRNA-326, simulating interactions between 100,000+ atoms to improve the system.
- Programmed a Retrieval Augmented Generation Q&A chatbot using LangChain and HuggingFace, reducing hallucination through a knowledge-grounded approach.
- Spearheaded the wiki development by coordinating a multidisciplinary team to create a wiki with 12,000 lines of code using HTML, CSS, JavaScript. Authored a GROMACS tutorial on our wiki to aid future researchers in conducting simulations.
- Awarded a Gold Medal at iGEM 2024 Giant Jamboree in Paris for exceptional research work.
- Providing mentorship and guidance as a Teaching Assistant to the next year's Stony Brook iGEM Team, sharing experiences and lessons learned to foster a supportive and growth-oriented environment.

Faculty Student Association at Stony Brook University   **Stony Brook, NY**

IT Assistant   *January 2024 – July 2024*

- Developed and maintained databases using MySQL and Google Sheets, automated processes by building Google AppScript algorithms like Binary Sort and Search, improving automation and work efficiency.
- Inventoried, performed maintenance and resolved issues in over 400 systems across the university campus.
- Installed and configured computer hardware & software, including Windows and Linux operating systems, in 40+ systems.

Omniscience Corporation   **Palo Alto, California, United States** (Remote)

Web Developer Intern   *April 2023 – June 2023*

- Created a life insurance flask web app with 3000+ lines of code using HTML, CSS, JavaScript, Jinja and Bootstrap Library.
- Developed a SQL database to store insurance user data, showcasing problem-solving skills in data architecture.
- Containerized the application using Docker for seamless deployment & collaboration via a consistent technical environment.

PROJECTS

SBUGPT   *February 2024 – May 2024*

- Collaborated with Stony Brook Robotics Club to build a Chatbot for the university using Python and libraries like HuggingFace, TensorFlow and Pandas by fine-tuning Meta's LLaMA2 Model on data scraped from the university's website.

Windows CenterStage   *November 2023 – December 2023*

- Built a 500+ line Python program to zoom-in, track & keep the user's face centered on the camera using libraries like TensorFlow, OpenCV, Albumentations and NumPy by training a Facial Recognition Neural Network Model on over 6000 images.

LEADERSHIP

University Scholars Fellowship at Stony Brook University   **Stony Brook, NY**

Teacher Assistant   *January 2024 – (Present)*

- Mentoring 20 incoming University Scholars students, gaining valuable teaching experience and leadership skills.
- Collaborating with University Scholar Program Director in course development, designing creative presentations, graphics, and videos to enhance learning engagement.