ISHAAN GUPTA

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US Citizen - No work Auth Required

SUMMARY

Highly motivated computer science graduate with a Bachelor's degree in Computer Science. Proficient in programming skills in languages such as Python, Java, and C++ as well as in software development methodologies and tools, like Agile and Git. Seeking opportunities to apply my knowledge and experience to contribute to cutting-edge technology developments in a dynamic and collaborative environment.

EDUCATION

Bachelor of Science in Computer Science   **University of Minnesota, Twin Cities**
College of Science and Engineering   *September 2021 – December 2023*
- **Major**: Computer Science, **Minor**: Mathematics
- **GPA: 3.92 / 4.00**.
- University Honors Student; Dean's List throughout college

Master's of Science in Computer Science   **University of Minnesota, Twin Cities**
College of Science and Engineering   *January 2024 – May 2025*

Course Work:
- Algorithms and Data Structures
- Operating Systems
- Advanced Programming Principles
- Regression & Statistical Computing
- Cryptology
- NLP (Natural Language Processing)
- Machine Architecture and Organization
- Artificial Intelligence
- Optimization for Machine Learning

High School Diploma   **(GPA 3.94)**   **Eden Prairie High School, MN**

SKILLS

Programming Languages: Java, Python, C#, C, Ocaml, Julia, R, Assembly, JavaScript, C++

Technical Skills: Experience in Unity, VSCode, GitHub, Perforce, Jira, Intellij, Node.js, Heroku, MongoDB, Docker, Agile Methodology, React, Keras, Pytorch, OpenAI, Angular.js

EXPERIENCE

Software/Firmware Developer Intern, Seagate Technologies, Shakopee, MN   *May 2023 – Current*
- Primary responsibilities include design, development and integration of embedded code for Seagate Hard drives.
- Interacted with customers such as Google, Microsoft, and Meta to analyze and resolve failures and performance issues during product qualifications.
- Developed software and firmware tools that generate production analytics and customer drive reports, using C and Python. This tool helped reduce issue resolution time by 10%.
- Used Agile/Scrum methodology and performed within a team of 10 senior firmware engineers.

LLM and NLP Researcher, U of MN, Minneapolis, MN   *December 2022 – Current*
- Working with a Ph.D. student in U of MN's NLP (Natural Language Processing) Group under the guidance of Professor Dongyeop Kang.
- Research in Collaborative-NLP systems between humans and machines, and developed a full-stack web-based prototype system that collects and models eye-tracking data using JavaScript behavioral framework (jsPsych), Python, PHP, Node.js, Heroku and MongoDB.
- Currently researching ways to allow Large Language Models, like ChatGPT, to analyze and build conclusions from graphical data using Pytorch and OpenAI API.

PROJECTS

Unity Melee Fighter Game
- Created a 2D Fighter Game. Code Development done in C# using Unity API.
- Implemented fluid sprite animations, character control, enemy AI and optimized A* pathing with special combat effects (such as knockback, shield blocking, parrying, etc.)

PUBLICATIONS
- Debarati Das, Ishaan Gupta, Jaideep Srivastava, and Dongyeop Kang. 2023. Which modality should I use – text, motif, or image? : Understanding graphs with Large Language Models.