

ATSI GUPTA

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Education

University of Illinois at Urbana-Champaign | *Honors James Scholar (GPA 3.86)* Expected: May 2026

BS in Computer Engineering and BS in Innovation Leadership Entrepreneurship in Engineering

Relevant Coursework: Data Structures, Computer Systems & Programming, Algorithms, Linear Algebra with Computational Applications, Discrete Structures, Applied Parallel Programming

Skills

Languages: Python, Java, C/C++, JavaScript, HTML5, RISC-V, x86

Technologies: React, Node.js, Git, Linux, Tailwind, AngularJS, MATLAB, Arduino, Figma, Sketch, Adobe XD

Frameworks: Agile, Waterfall

Database: SQL, MongoDB

Experience

Haylon Technologies

May 2024 – Present

Software Engineering Intern

Edison, NJ

- Developed and maintained backend services and REST APIs to support various business operations.
- Integrated front-end components with back-end services to ensure seamless UI/UX flow.
- Collaborated with cross-functional teams on battery output prediction algorithms.

Mirage — Founder

Oct 2023 – May 2024

Chemical Laboratory Startup

Urbana, IL

- Built backend infrastructure supporting laboratory applications, including API development and database management.
- Conducted user interviews and implemented feedback-driven features to enhance product engagement.

Innovation 200 and Innovation 250 — Teaching Assistant

Aug 2023 – Present

Introduction to Entrepreneurship

Urbana, IL

- Guided students on software engineering principles and entrepreneurship.
- Assisted with curriculum development, focusing on the practical application of coding and user interface design.

School Simplified — Chief Academic Officer, Board of Directors

Sep 2020 – 2022

Online Non-Profit

New York

- Designed and implemented algorithms for teacher-student pairing, improving academic outcomes for over 700 students.
- Developed a moderation bot to streamline operations for a staff of 300.

Projects

Parallelized CNN Model with CUDA | *Personal Project*

Jan – May 2024

- Used NVIDIA's CUDA framework with GPU cluster access to implement a CNN model from scratch.
- Optimized memory coalescing and thread management to enhance GPU performance, achieving a 1000x speedup over CPU.

Creating an Operating System | *Course Project*

Jan – May 2024

- Developed an OS from scratch, focusing on resource management and synchronization.
- Implemented system calls and interrupt handling using RISC-V assembly.

Interactive Web Platform for Engineering Open House | *Technical Director*

June 2023 – Present

- Designed and developed an interactive website with dynamic maps and event details for a large-scale university event.
- Conducted usability tests, improving engagement by 30% during the event.

Leadership

UIUC Fizaa (Competitive Collegiate Dance Team)

Jan 2023 – Present

Captain

Urbana, IL

- Led fundraising efforts, raising over \$10,000 for the team.
- Directed cross-functional teams and managed logistics, ensuring efficient operations and project delivery.