

Swikrut Dhanorkar

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Education

Illinois Wesleyan University, Bloomington, IL

Cumulative GPA: 3.95/4.0

Bachelor of Science, June 2026 | Double Major: Computer Science and Physics

Skills

- Coding: C/C++ Programming; Python; Java; JavaScript; SQL; HTML/CSS
- Physics/Data Analytics: MATLAB; Data Acquisition; Modelling Physical Systems; Database Management; Excel
- Web Development: Full Stack; AGILE Methodology; Software Testing; Git/GitHub; Version Control

Employment Experience

Software Dev. Teaching Assistant | *Illinois Wesleyan University*, Bloomington, IL August 2024 – December 2024

- Facilitated study sessions for a cohort of 24 students, addressing course concepts and questions; received positive feedback from over 90% of participants on improved understanding and application in assignments.
- Assisted students with their learning challenges, enhancing their grasp of core software development concepts.
- Graded homework assignments, providing timely and precise feedback, while streamlining communication between students and faculty.

Accelerate Program Participate - Research Track | *IBM*, Remote

June 2024 – July 2024

- Selected from 10,000+ applications (top 5%) for the Research track, focusing on advanced IBM research domains, including AI, Hybrid Cloud, Quantum, and Semi-Conductors.
- Developed professional skills and technical expertise in IBM research areas throughout the program; received mentorship from IBM researchers by expanding professional network and preparing for internships.

Resident Community Advisor | *IWU Office of Residential Life*, Bloomington, IL

August 2023 – Present

- Mentor a staff of 7 resident advisors and facilitate community building through programming, supporting crisis-response and emergency management.
- Supervise and manage administration for residence hall, including check-ins, maintenance, and staff meetings.
- Collaborate on departmental initiatives and contribute to staff selection, training, and orientation processes.

Technical Projects

DNA Sequence Alignment Program (Computational Biology)

August 2024 – September 2024

- Developed a global sequence alignment algorithm based on Needleman-Wunsch for DNA and Protein sequencing using dynamic programming to optimize alignment.
- Optimized the traceback process to efficiently reconstruct the alignment path, ensuring correct sequence alignment and performance in large datasets.
- Designed the program to calculate key statistical alignment score, number of matches, mismatches, gaps, and percentage similarity, improving biological sequence comparison insights.

Spendr: Web App (Software Development)

March 2024 – May 2024

- Designed and developed Spendr, a CRUD expense tracking web application, incorporating the following features: entering, editing, and correcting expenses, account creation, and logins.
- Implemented data visualization, categorization, and graph-generation to provide user with enhanced insights into spending patterns.
- Managed prioritization and time estimation of features, ensuring expedient delivery and project scope.

Webpage Data Scraper (Self-driven)

June 2023

- Developed a web scraping script to automate data extraction from e-commerce platforms, employing advanced parsing techniques and HTML navigation.
- Implemented functionality to handle dynamic content and various websites, ensuring robust data collection.
- Created a user-friendly interface for setting parameters and viewing scraped data, improving usability for non-technical users, with integrated error handling and data validation to maintain reliability.