Lianhao Zheng

646-920-6854 | lianzheng@u.northwestern.edu | linkedin.com/in/lianhao-zheng | github.com/LianhaoZ

EDUCATION

Northwestern University   Evanston, IL
Concurrent B.A. and M.S. in Computer Science, Minor in Data Science   *Expected June 2026*
- GPA: 3.81/4.00 | Dean's List (4/4) | QuestBridge Scholar | LEDA Career Fellow | NU Bioscientist Grant Award | Codepath Career Preparation Fellow
- Relevant Coursework: Data Structures & Algorithms, Artificial Intelligence, Design & Analysis of Algorithms, Computer Systems, Generative Methods

EXPERIENCE

Above and Beyond Computer Science (ABCS) Fellow   Jan. 2024 – Feb. 2024
Meta   *Remote*
- Selected as one of 100+ participants from across the US and Singapore to participate in Meta's 5-week Program
- Attended weekly workshops focused on mastering the knowledge, skills, and mindsets for a successful technical interview in the industry
- Focused on topics including arrays, strings, linked lists, time complexity, recursion, stacks & queues, hash tables, trees, heaps, and graphs

Undergraduate Teaching Assistant   Sep. 2023 – Dec. 2023
Northwestern University Department of Computer Science   *Evanston, IL*
- Advised 400+ students in Fundamentals of Computer Programming class for 6-10 hours weekly in office hours
- Worked closely with Professor Connor Bain to give feedback on student code and examinations

Artificial Intelligence Research Assistant   June 2023 – Aug. 2023
Mentor: Keara Lane, PhD (The Lane Lab, Department of Molecular Biosciences)   *Evanston, IL*
- Optimized Deep Learning models to accurately classify over 9000 tiff images of macrophages during Salmonella Typhimurium infections with a 78% accuracy rate
- Designed a Python3(Numpy, Matplotlib, Pandas) and Jython/Fiji-ImageJ based pipeline, leveraged Globus Data Management and High Performance Computing Clusters (HPC) to streamlining bioimage analysis workflows
- Developed Bash Scripts to automate workflows for parallel image processing and analysis on HPC, utilizing Git and GitHub version control to facilitate collaboration on the codebase
- Conducted a comprehensive analysis of the current research landscape for *Applying Deep Learning Algorithms To Track Cells In Time Lapse Microscopy* Project, and presented in the Annual Undergraduate Research Symposium

PROJECTS

Personal Website | *React, Tailwind CSS, Netlify*
- Utilized Three.js and React Three Fiber to develop immersive 3D graphics, Framer Motion for animations, and Tailwind CSS for more visually appealing design
- Integrated responsive design techniques and optimization techniques like Suspense and Preload

Mask Up | *FaceMesh Detection API, JavaScript, Git*
- Developed a Face tracker that utilizes Face mesh detection API to create masks that follows user movements
- Employed P5.js and Vue.js to incorporate animations and interactive graphics, elevating the website's visual appeal and enhancing user experience

TECHNICAL SKILLS

Languages: Python, C/C++, JavaScript, HTML/CSS, Bash
Software/Tools: React, Node.js, Three.js, p5.js, Tailwind CSS, Unix, Visual Studio Code
Libraries: Pandas, NumPy, Matplotlib