

Jeffery Wei

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EDUCATION

University Of Maryland, College Park | College Park, MD

Expected Graduation May 2026

Bachelor of Science

Majors: Computer Science (Machine Learning Specialization) and Applied Mathematics

- GPA: 3.7/4.0
- Awards: President's Scholarship
- Coursework: Object-Oriented Programming I and II, Linear Algebra, Computer Systems, Discrete Structures

SKILLS

- **Programming Languages:** Java, Python, C, Assembly (x86-64), JavaScript, HTML, CSS
- **Frameworks/Libraries:** PyTorch, OpenCV, React, React Native, Node.js, Flask, REST APIs, Bootstrap, jQuery
- **Developer Tools:** Git, Visual Studio Code, Eclipse, PyCharm, JupyterLab, Figma, MATLAB

EXPERIENCE

Software Engineer Intern | NASA Goddard Space Flight Center

Jun 2024 - Present

- Analyze data compression techniques to optimize model output size, potentially saving \$150 million in cloud storage costs.
- Develop techniques for generating forecast ensembles analyzing climate variability and predictability.
- Redesign an integrated atmosphere-ocean reanalysis interface, improving data visualization performance by 35%.

Research Intern | UMD CS MIND Lab

Oct 2021 - Present

- Investigate machine learning models to predict onset of respiratory illness based on patient breathing patterns.
- Process raw breath data to extract key features and reduce noise by 80%, enhancing accuracy of prediction models.
- Improve MIND Lab website interface and boost site loading times and performance by up to 30% using React and Gatsby.

Chief Executive Officer and Co-Founder | Prism Website Design

Apr 2021 - Present

- Design and develop professional websites for over 10 small businesses, increasing online presence and boosting sales.
- Deliver modern solutions to improve navigability and increase exposure, including SEO and responsive design.
- Manage all operations, marketing, and communications, resulting in a 30% growth in customer base over a 6-month period.

Technical Lead | Hack4Impact

Feb 2024 - Present

- Develop a mobile app for a nonprofit promoting family literacy, leveraging React Native to facilitate parent tracking of children's reading assignments, reaching over 80,000 households.
- Integrate Google Firestore database to efficiently manage, store, and fetch assignment data for parents and children.
- Lead team of six engineers, directing technical development, architecting scalable solutions, and assigning sprint tasks.

Software Engineer Intern | Upcounty Prevention Network

Mar 2022 - Aug 2023

- Led a team of six other interns through agile sprints, ensuring efficient task management and progress towards goals.
- Directed lessons on industry practices, including wireframing, component-based development, and version control.
- Overhauled website to align with rebranding initiatives, enhancing SEO by 40% and accessibility by 25%.

Full-Stack Developer | Poolesville Day Inc.

Mar 2022 - Jan 2023

- Maintained the website of the Poolesville Day festival to promote event participation, attracting over 12,000 attendees.
- Created and implemented website forms and payment portals to generate new revenue channels and engage involvement.
- Redesigned site architecture and navigation scheme to optimize ease of use, eliminating eight redundant pages.

PROJECTS

SnapChef | jwei.pythonanywhere.com | Python, Flask, Javascript, HTML, CSS

- Developed a web app that utilizes computer vision for ingredient detection and recommends recipes based on results.
- Trained and integrated a custom machine learning model for ingredient detection using OpenCV and YOLOv8.
- Implemented a frontend with video streaming functionalities using JavaScript and developed a backend server using Flask to asynchronously handle incoming HTTP requests, image uploads, and provide RESTful API endpoints for processing.

Portfolio Website | jefferywei.com | React, HTML, SCSS

- Designed and developed a dynamic personal portfolio website to showcase professional projects, skills, and achievements.
- Ensured a seamless and responsive design across various screen sizes using Media Queries in SCSS.