

Vivian Ni

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EDUCATION

Columbia University
B.S in *Computer Science*

New York
Expected May 2028

Relevant Coursework: Intro to Java Programming, Data Structures

PROFESSIONAL EXPERIENCE

Northrop Grumman Mission Systems | Intern | San Diego, CA

Jun - Aug 2024

- Developed an automation script to verify data integrity using Python Pandas
- Made several code commits to production-level code
- Learned to read the MIL-STD and understand the structure of Link16 J-Series Messages
- Refactored and modified code within complex inheritance hierarchies

Science Internship Program at UCSC | Researcher | Santa Cruz, CA

Jun - Aug 2023

- Worked with UCSC faculty to conduct computational media (CPM) research.
- Conducted literature review for 21 papers designed studies on 2 user groups.
- Created Python scripts to spearhead the development of personalized learning tutorials for Blender, a 3D modeling software
- Presented final research at a symposium

PROJECTS

Codemaxxers | Javascript | Java | Thymeleaf | SQLite | AWS | Python

Mar - May 2024

- Worked in a team of 10 implementing SCRUM and AGILE methodologies to develop a game to educate users on computer science.
- Designed a mockup of the UI/UX of my feature using Canva and Figma. Documented progress using GitHub Projects and Issues (See portfolio for more details).
- Created a custom API to track the number of 'games played' and 'keys collected' by users using GET and POST requests.

Sorting Algorithm Museum | Javascript | Java | Thymeleaf | SQLite | AWS

Oct - Dec 2023

- Developed a full-stack web application with Thymeleaf serving a REST API
- Created dynamic visualizations of multiple sorting algorithms (e.g., Quick Sort, Merge Sort, Bubble Sort) using JavaScript Canvas. These animations demonstrate how each algorithm processes and sorts data.
- Developed an interactive platform where users can like different artworks, with sorting options to order the artworks based on the number of likes

Perfect Car Finder | Javascript | Python | Flask | SQLite | AWS

Oct - Dec 2022

- Developed an advanced filtering system for a car database, allowing users to filter cars based on price, color, type, model, and brand.
- Designed an intuitive interface to enhance user experience, ensuring that users can quickly find the cars that meet their specific requirements.

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Phi Gamma Nu (PGN) | Member

- Part of a professional development organization focusing on professionalism, philanthropy, and community

Oct 2024 - Present

STEM Accelerates Girls' Excellence (SAGE) | CEO

- SAGE is a 501c3 nonprofit organization aiming to empower girls in STEM and bridge the gender gap.
- Host seasonal sessions, 7 unique subjects (Python, Genetics, Marine Science, etc) per session spanning 6 weeks.
- Led a diverse team of 30 students & 266 teachers across 8 countries in hosting STEM classes for 1500+ girls.
- Boosted online engagement by 316% and gained 6K+ followers in under one month.
- Expanded SAGE's international chapters to 3 new countries (Brazil, Egypt, and Canada).

Sept 2022 - Jan 2024

TECHNICAL SKILLS

Languages/Frameworks: Java, Python, Javascript, HTML/CSS, Flask, Thymeleaf

Tools: Git/Github, Visual Studio Code, Docker, AWS, SQLite, Pandas

Skills: Native Mandarin Speaker, Collaboration, Creativity, Problem Solving, Leadership

Interests: Painting, Journaling, Cafe Hopping