

Victor Gao

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EDUCATION

Purdue University

Bachelor of Science in Computer Science Honors and Data Science

GPA: 4.00/4.00

Relevant Courses: Statistical Theory, Probability, Linear Algebra, Data Mining and Machine Learning, Data Structures and Algorithms, Computer Architecture, Systems Programming

West Lafayette, IN

Expected May 2026

EXPERIENCE

Undergraduate Teaching Assistant – C Programming | C/C++, Rust

Aug 2023 – Present

Purdue University

- Leading two labs of two dozen students each, reinforcing core programming concepts to students
- Analyzing homework assignments ahead of time to deliver feedback, minimize errors and inconsistencies, and improve students' overall experiences with assignments
- Monitoring discussion board of 700+ students, providing clarification/solutions to student queries

Software Engineer Intern | TypeScript, Vue, C#, Docker, AWS, RavenDB, Git

May 2024 – Aug 2024

Momentum Technologies

- Utilized full stack technologies to develop venue and event management software that processes \$10B+ annual revenue for 60K+ clients
- Upgraded front end framework from Vue 2 to Vue 3, increasing product security, stability, and longevity
- Authorized unit tests for front end components and back end services, reducing QA testing time by up to 25%

Data Science Researcher | Python, TensorFlow, NumPy, R

Aug 2023 – May 2024

Tesla

- Processed data for 120K+ modules to develop a Process Flow Interconnection Tool by determining flow rate of modules, allowing for forecasting of downtime instances and increased production line flow
- Leveraged TensorFlow and regression analysis tools to make accurate predictions regarding product flow and to identify relationships and interactions between different production lines

Data Science Researcher | Django, HTML/CSS

Aug 2022 – May 2023

Mara Elephant Project

- Consolidated imagery and data over the last 20 years from Google Earth and EarthRanger to generate themed HTML reports of forest cover loss in the Greater Mara Ecosystem
- Integrated reports to Mara's online database with Django to allow thousands of users to generate, view, and download reports, contributing to Mara's mission of raising awareness about elephant habitats in the Mara region

Research Assistant | C, Linux

Nov 2020 – May 2022

University of Kentucky — Advisor: Dr. Zongming Fei

- Developed a program in C on Ubuntu OS to improve reliability, availability, and efficiency of multi-cloud storage systems by up to 15%
- Implemented TCP protocols to simulate and optimize file transfers between multiple cloud storage systems
- Authored a capstone research paper and presented research at various science fairs and symposiums

PROJECTS

Groovy Grids | AWS, React, Spotify API

Oct 2023 – Dec 2023

- Spearheaded development of a music trivia game with data pulled from Spotify's API
- AWS DynamoDB implementation allows users to compare scores with each other and view most popular guesses

Portfolio Website | React, JavaScript, HTML/CSS

Jun 2023 - Aug 2023

- Created a personal portfolio website from scratch using JavaScript to showcase various projects
- Leveraged CSS and HTML to produce stylized animations and sections while allowing for the website to be properly displayed on most browsers and devices

Flashcard App | PostgreSQL, Express.js, React, Node.js

Jun 2023 – Jul 2023

- Built a full stack web app using HTTP operations where users can create, review, study, and share flashcards
- Adaptive review algorithm caters to users' strengths and weaknesses, increasing user learning and retention
- Local caching of data reduces load speeds by up to 50% by minimizing database calls