ALASTAIR DENG

adeng27@stanford.edu || (850) 879-9010 || Personal Website: https://alastairdeng.vercel.app/

Education

Stanford University Stanford, CA

GPA: 4.017, B.S. Candidate in Computer Science

June 2027

Relevant Coursework: Programming Abstractions, Computer Organization & Systems, Mathematical Foundations of Computing, Linear Alg. & Multivariable Calculus, Intro to Scientific Python, Intro to Software Systems/Tools

Benjamin Franklin High School

New Orleans, LA

Valedictorian, Captain of Track & Field Team, All-National Violinist, GPA: 4.0, ACT: 36

May 2023

Software Engineering Experience

Berkeley National Laboratory

Berkeley, CA

Software Development Intern — High Performance Computing Team

6/30/2023 - Present

- Developing a user portal to manage superclusters for UC Berkeley and the Berkeley National Lab researchers. This portal replaces Google Forms and ticket workflows for account management
- Primary tasks are in backend development, with heavy utilization of Django and Python

Stanford University Stanford, CA

Student Researcher

4/1/2024 – Present

- Primary developer for art feedback research project which explores the potential of automated art feedback for novice artists
- Responsible for creating the code to test various forms of automated art feedback, which includes the development of the drawing process, data collection, and automated feedback
- Utilizes MERN stack with paper.is

Posers! Stanford, CA

Full Stack Developer

12/2023 – Present

- Created a web game which involves machine learning that estimates a user's pose from live webcam footage. The approximate positions of key body parts (elbows, shoulders, etc.) on the image are located, normalized, and compared to check whether the user is in the correct pose
- Application employs the AI framework MediaPipe for pose estimation and was built using Next.js, TRPC, Prisma, and Typescript

Admitted New Orleans, LA

Co-Founder, Full Stack Developer

6/2023 - Present

- Developing Admitted, a college prep service connecting high school students with college students, providing affordable access to high-quality essay reviews, resume reviews, and mock interviews
- Designed the UI/UX, including the layout, visual design, icons, and graphics
- Implemented RESTful API for financial transactions and an automated email communication system

Other Experience

Tulane University School of Science and Engineering

New Orleans, LA 9/2019 – 9/2021

Student Researcher

- Co-authored <u>publication</u>: "Characterizing the role of Pdgfra in calvarial development"
- Researched the underlying molecular mechanisms in craniofacial disorders using a mouse embryo model

Technical Skills

Programming Technologies: Java, C, C++, Python, JavaScript/TypeScript, HTML/CSS

Software/Web Development: React.js/Next.js, Prisma, TRPC, Node.js, Express.js, Firebase, Flutter, Django

Data Science: Python with NumPy, Pandas, and scikit-learn; Web Scraping (BeautifulSoup)