Alan Nguyen

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EDUCATION

University of California, Los Angeles **Sep 2020 – Jun 2024** (**Expected**)
B.S. in Computational and Systems Biology - Data Sciences **GPA**: 3.879 (Dean's Honors List)

- **Relevant Coursework**: Software Construction, Data Structures & Algorithms, Discrete Mathematics, Linear Algebra, Differential Equations, Mathematical and Computational Biological Modeling

WORK EXPERIENCE

UCLA Asian American Studies Center, *Frontend Developer* **Jul 2023 – Present**

- Use **JavaScript**, **HTML**, **jQuery** and **AJAX** to engineer interactive elements, pages and pop-ups of a 10 million dollar research project application disseminating UCLA's AAPI research
- Write **jQuery** based **AJAX** requests to retrieve website content from a remote server for display
- Implement global styles in **SCSS** to be translated to **CSS** with Sass compiler per direction of design team

TransCanWork, *Developer Project Lead* **Oct 2022 – Present**

- Develop full-stack **React** web application for nonprofit organization TransCanWork, automating employment tracker logging over 2500 transgender jobseekers and their employment journey milestones
- Use Material-UI and Bootstrap libraries and **Firebase** as a backend database to convert inefficient Excel storage system into separate navigation pages such as assessment, profile, search and filter
- Review developer **Github** pull requests to maintain code robustness and readability
- Translate **Figma** prototypes into code, implementing features in **HTML/JavaScript** and styling in **CSS**

Junction of Statistics and Biology, *Machine Learning Research Assistant* **Jan 2023 – Jun 2023**

- Engineered **Python** program investigating classification difficulty of automatic cell annotation methods, using a **support vector machine** to classify cells based off single-cell RNA sequencing data
- Utilized **NumPy**, **SciPy**, **pandas**, **Matplotlib** and **scikit-learn** libraries to develop and test individualized simulated datasets based on known truths about gene expression
- Analyzed **macro F1 scores** to assess support vector machine performance with varying class definitions

PROJECTS

DopaMind, React, CSS, JavaScript

- Generated random prompts with **Cohere API** for anagrams game specialized for students with ADHD
- Created Pomodoro timer component for user to switch back and forth between break and work time
- Used **AssemblyAI** to implement voice transcription and mind map to visualize students' ideas

BruinNotes Educational Platform, React, CSS, JavaScript

- Used password hashing stored in **MongoDB** database to create registration and login system
- Implemented search and filter features for students to post or find study resources
- Designed and coded home page displaying study material cards, post feature and search bar

Personal Portfolio, React, CSS, JavaScript

- Designed and implemented a **React-based** personal portfolio including project, resume and about pages
- Utilized React components and **CSS Flexbox/Grid** to display features according to **Figma** wireframes
- Created custom components for project cards and headers, passing in props for reuse

SEASHarmony Matching Program, Python

- Utilized **scikit-learn's** K-means algorithm to pair 1500 incoming engineering students with mentors
- Used dozens of qualitative parameters from survey responses to create axes for optimal pairings

RELEVANT SKILLS

Technical Skills: Python, JavaScript, HTML/CSS, C++, Java, R
Tools: React, VS Code, Git, Figma, Firebase, Node, Object-Oriented Programming, Linux
Interests: Crochet, hiking, LGBTQ+ rights, music theory, Spanish language, crossword puzzles