Matthew Kao

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EDUCATION

University of California, Berkeley   **Berkeley, CA**
Bachelor of Arts in Computer Science, GPA: 3.7   *May 2023*

SKILLS

Languages: Python, C++, Java, C, Dart, Ruby   **Tools:** Figma, GitHub, Firebase, AWS, GCP, PGAdmin
Front-end: HTML5, CSS3, JavaScript, React, React Native, Flutter   **Back-end:** Node.js, Django, SQL, MongoDB, REST

PROFESSIONAL EXPERIENCE

Walmart   **Sunnyvale, CA**
Backend Engineer   *Sep 2024 – Present*
- Contributed to Walmart's StyleGuide project, leveraging Generative AI and Machine Learning techniques to automate product listing validation, reducing merchant review time from 5-10 days to just hours, enabling faster product approvals.
- Built and deployed over 10 RESTful APIs using Django to power automated content validation and standardization, designed new schemas and performed migrations using PostgreSQL, all supporting Walmart's Style Guide Workflows.
- Reached over 85% Test Coverage by building a suite of tests with Coverage and contributing to regression testing during production releases, ultimately improving application reliability metrics during QA phases.

Certified Employment Group   **Emeryville, CA**
Web Developer   *Oct 2023 – Jul 2024*
- Revamped Certified Employment Group's web interfaces using HTML5, CSS, JS to enhance User Experience; conduced usability tests, resulting in a 20% reduction in bounce rate.
- Utilized the Selenium framework for end-to-end testing, achieving a 96% pass rate on automated tests; reduced production bugs and ensuring web application reliability.
- Developed Python-based server-side applications, incorporating advanced algorithm for data caching and asynchronous processing, which slashed API response times by 50% and increased the efficiency of database queries using SQL.

Dbrief.AI   **Berkeley, CA**
Lead App Developer   *May 2022 – Dec 2022*
- Led the creation of the Dbrief.AI mobile app from scratch using Flutter, deploying the fully functional app in 3 months.
- Constructed and Designed the User Interface using Figma, employing best practices in UX design and incorporating user feedback to enhance usability by 25% as measured through post-launch user interaction data.
- Architected the synchronization between the Application and Backend API, enabling real-time content updates based on the latest news, driving a 15% growth in daily active users.
- Leveraged Firebase's real-time database capabilities to enable approximately 500 dynamic data updates, enhancing the application's responsiveness and providing users with up-to-date information.
- Engineered and deployed innovative 'Tinder-style' swiping features, enabling users to showcase political viewpoints through left/right swipes, resulting in a 20% increase in time spent on the app per user.
- Guided and Mentored a team of 4 through iterative development cycles, by implementing agile methodologies, leading daily stand-ups, and facilitating cross-functional collaboration to deliver the Application on time.

PROJECTS

ResumeBuilder.ai   *Oct 2023 – Nov 2023*
Tech Stack: Python, OpenAI, Gradio, Convex, LLM, word2vec
- Engineered an AI-driven Automatic Resume Builder at CalHacks 10.0, tailored to intake a comprehensive CV and job description, then output a customized resume highlighting the most relevant project experience for the position.
- Implemented word2vec and Convex's vector search to curate 5-10 highly relevant projects from user CVs; fine-tuned project descriptions through LLM, resulting in precise and personalized recommendations for job applications.

Action Map   *Jan 2023 – May 2023*
Tech Stack: Ruby, Model-View-Controller (MVC), CSS, JavaScript, Rspec Tests, Cucumber Scenarios
- Fixed and Debugged an Application that Displays the US Map where the State and Counties are clickable, which will then show over 2500 Political Candidates.
- Established the interconnectivity between Controllers, Models, and Views that allow the app to search the Google Civic Information API to look up 50-100 Political Candidates in specific states.
- Refactored 80% of an old Application's legacy code by writing Characterization Tests and then following Red-Green-Refactor principles.
- Improved Test Coverage of every File in the directory to more than 90% by using RSpec, Cucumber and Caypbara Tests.
- Implemented and managed CI/CD pipelines, increasing deployment frequency to 2 deployments per week, ensuring more frequent and reliable updates to the application