

Technical Skills

Programming Languages: Python, Swift, Java, JavaScript, C/C++, Bash, SQL, Go

Operating Systems: macOS, iOS, Linux, Windows, Android, Chrome, UNIX

Framework: React, Flask, Vite, Fast API, Swagger

Software Tools: Git, Splunk, Docker, Selenium, Tableau

Hardware Tools: Verilog, VHDL

Apple Tools: PR3, Radar, TSTT, Quick, Xcode

Professional Experience

Founding Engineer - Zinley

Sep 2024 - Present

- Maintained PostgreSQL and Redis backend in Go and managed a multi-model LLM orchestration system with failover capabilities.
- Created docs and status website for SnowX and deployed on GCP that checks system health.
- Integrated Monaco editor within a Tauri app for cross-platform accessibility.
- Gathered beta feedback to improve deployment features, UI/UX, and user experience.
- Created API documentation using OpenAPI Spec/Swagger for seamless developer integration.
- Design, implemented, and automated project creation, database management, and API operations using Supabase, enabling scalable, real-time, and secure data solutions.
- Created and executed a social media and outreach, gain 100+ users in first five days via marketing.
- Produced and edited video tutorials and demos, enhancing user onboarding with tools like iMovie.

CoreOS Software Engineer (CE) - Apple

Jun 2023 - Nov 2023

- Developed a Splunk query to identify over 63 persistent failures within the system. Reported more than 250 bug reports for software builds.
- Conducted livability testing, blackbox testing, and triaging for devices on all Apple platforms, saving 9 hours per test cycle.
- Improved overall testing efficiency by integrating XCTest frameworks with Python automation, leading to a 30% reduction in test execution cycles.
- Collaborated with cross-functional teams to integrate the Python script with existing monitoring tools, resulting in a 75% improvement in overall pipeline health visibility and proactive issue resolution.

Tech Advisor - Apple

Jun 2022 - Feb 2024

- Researched and resolved complex technical issues for Apple customers, resulting in a 90% customer satisfaction rate and a 20% decrease in call escalations to senior support.
- Documented detailed troubleshooting processes for common Apple product issues, reducing average handling time by 10% and improving overall team efficiency.
- Collaborated with cross-functional teams to implement new communication protocols between tech advisors and engineers, leading to a 15% increase in bug resolution speed.

Fullstack Developer Intern- Ren Energy

Mar 2022- Aug 2022

- Led a team of interns in developing and deploying a robust data validation API server using JavaScript, TypeScript, and the Node.js framework, resulting in a 40% improvement in data accuracy and efficiency metrics.
- Automated data validation processes for API server responses, leading to a 60% increase in data integrity and a 90% reduction in manual error rates.
- Designed and implemented a new data validation process that boosted database accuracy by 30%.
- Collaborated with a fullstack developer to ensure seamless integration of the data validation API into the existing application stack.

Data Clerk - Purple Cow Agency

July 2020 - Dec 2020

- Structured and organized client data for 200+ customers, utilizing advanced Excel functions and MySQL databases, resulting in improved data quality.
- Utilized Tableau to analyze client data, identifying key trends and correlations that led to a 15% increase in client retention rates.
- Implemented ELT pipelines to efficiently process client data, leading to a 30% decrease in data processing time and enabling real-time analytics for improved decision-making.

Software QA Specialist - Finders Tree

Sep 2018 - May 2022

- Executed thorough exploratory and automated testing of SaaS websites using Selenium in Java, resulting in a 20% decrease in critical bugs.
- Documented and diagnosed bugs found during the testing process, resulting in a 15% reduction in overall bug resolution time and improving the user experience.
- Conducted manual testing on website functionality and security measures, identifying and rectifying 6 critical vulnerabilities.

Embedded Software Engineer Intern - NETWORK Sound

Nov 2019 - May 2020

- Collaborated with hardware engineers to conduct testing on the embedded software, achieving a 98% success rate in connection stability and compatibility with various devices.
- Revamped the ESP32 coding structure in C, leading to a 30% improvement in system performance and a 25% reduction in overall energy consumption.

Professional Experience

- Collaborated with cross-functional teams to integrate CAPWAP and IAPP protocols into the software system, enhancing network performance by 30%.

Project Experience

-C.H.O.N.K

- Engineered automated data collection using DDG API, gathering 2400+ images across multiple categories.
- Developed robust ETL pipeline handling multiple formats with fallback mechanisms and error recovery.
- Implemented data validation system with multi-stage checks ensuring data quality and consistency.
- Developed a deep learning image classification system using TensorFlow and ResNet50.
- Implemented continuous learning system with user feedback, improving model accuracy over time

AI Story Teller

- Innovatively developed an AI Storyteller app, seamlessly integrating computer vision and NLP technologies.
- Demonstrated expertise by leveraging Hugging Face's Transformers for image-to-text and integrating GPT-2 for creative story generation.
- Proficient in Python, ML, and deep learning techniques, with additional capabilities showcased through OpenAI API for NLP tasks.

Search and Rescue using AI/ML

- Developed Raspberry Pi project to locate and rescue individuals in remote areas with low visibility.
- Developed a program in C to fetch real-time GPS coordinates and thermal camera images.
- Used Python for SMS communication and OpenCV and Tensorflow to assist with image processing.
- Developed embedded software that act as a hub for all of the components.

Measure Soil Moisture using Microcontroller

- Developed embedded software in C to interface with GPIO for capturing moisture levels in soil.
- Implemented an analog-to-digital converter to display values on an LCD screen and make decisions using a finite state machine.

Homework Helper SaaS

- Developed a Discord bot using Python and Node.js to assist students with homework and tests.
- Discord server grew to over 200+ students using the service.

AI Story Painter

- Innovatively developed an AI Storypainter app, seamlessly integrating computer vision and NLP technologies.
- Demonstrated expertise by leveraging Hugging Face's Transformers for image generation and integrating LLM.
- Comfortable with different models. Hosted and managed project on GitHub, highlighting version control practices.

YouTube Rebuilt

- YouTube-inspired Platform: Develop a video-sharing platform resembling YouTube.
- Key Features: Fetch video data (views, likes, channels), enable search functionality, categorize videos.
- User Experience: Focus on intuitive interface, efficient content delivery, and user engagement features.

React Live Chat

- Developed a real-time chat application using Node.js, React.js, and ChatEngine.io.
- Implemented user authentication, socket connections, and real-time messaging with features such as group chats, direct messages, and file attachments.
- Troubleshoot and debugged to ensure seamless user experiences, showcasing proficiency in full-stack development and effective problem-solving.

Pokemon Index

- Used React to develop a web app to fetch data from PokeAPI and display Pokémon details.

School Database Management

- Developed database with MySQL based on the information provided and data cleaning to achieve an organized and easy access database. The project helped over 80 students select their desired GE classes.

Education

California State University - Sacramento

B.S. Computer Engineering

Georgia Institute of Technology

M.S. Computer Science

Sacramento, California

Status: *Graduated*

Atlanta, Georgia

Status: *In Progress*

Certification

Coursera:

Relational Database and SQL	Google Data Analytics
Data Visualization with Tableau by UC Davis	Data Science by DeepLearning.AI
Machine Learning Stanford University	Mathematics for Machine Learning
Unsupervised Machine Learning	Python for Data Science
AI & Development by IBM skillnetwork	

Accomplishments

Award:

Dean's Honor	Honors Student
President award	Winner of ICPC
Educational Excellence	Winner of Data Fest Chico

Language/Citizenship

Language:

English	Fluent
Mandarin	Fluent
Japanese	Classroom study

Citizenship:

United State	Taiwan
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