Katherine Chen

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EDUCATION

University of California, Los Angeles (UCLA) **Los Angeles, CA**
Linguistics and Computer Science **September 2023 - June 2027**
Double Minor: Data Science and Statistics, Bioinformatics
Relevant Coursework: Object-Oriented Programming, Data Structures and Algorithms, Computer Organization
Technical Skills: C++, C#, C, Python, Java, JavaScript, Linux, Swift, Azure, Git, POSIX, Assembly, R, Bash

Work Experience

Software Developer **Berlin, Germany (Remote)**
Akhetonics **September 2024 - Present**
- Designed and implemented memory allocation algorithms in C for an all-optical compiler,optimize performance
- Developed a Dual Numbers library in C# for neural network debugging and weight calculation
- Created a compiler that parses mathematical expressions into executable code using C#

Computer Architecture Intern **Berlin, Germany**
Akhetonics **June 2024 - August 2024**
- Utilized Sycl to parallelly process graphics for a binary space partitioning based rendering engine
- Developed C++ Doom demonstration with proprietary all-optical processor architecture
- Presented technical insights to an audience of 50+ physicists, explaining implemented SYCL algorithms
- Refractored and optimized legacy codebase by translating files to C++ for Intel oneAPI compatibility

Operations Supervisor **Los Angeles, CA**
Sunset Canyon Recreation Center (UCLA) **November 2023 – Present**
- Managed facility operations, ensuring safety, inventory control, and logistics for 100+ participant events

PROJECTS

Meal Split App (Swift, Python, JavaScript, Vision, Modeling) **December 2024 - Present**
- Developing an IOS app in SwiftUI that automates receipt scanning and payment splitting
- Implementing CoreML-based OCR for extracting itemized data, ensuring seamless user experience

Marble-Madness Game (C++) **December 2023**
- Engineered a physics-based game where players navigate a city while avoiding AI-driven enemies
- Implemented core game mechanics including movement physics, enemy interactions, and health tracking

Detecting Exoplanets (Python, Modeling) **July 2023**
- Spearheaded project in collaboration with Inspirit A.I. to develop an advanced A.I. system with preloaded libraries
- Showcased comprehensive models and crafted code to esteemed mentors, communicated technical aspects
- Developed A.I. system capable of detecting exoplanets with accuracy and authenticity of findings

ADDITIONAL INFORMATION

Languages: Fluent in English, Mandarin; Conversational Proficiency in Spanish, Elementary in German
Activities: Association of Computing and Machinery (Internal Affairs Board Director), Financial Literacy Group (Social Chair), Taiwanese American Student Association (Finance Chair), Climbing Club Team, BruinRunners, Backpacking Club, Soccer, Foundations Choreography