Kyle Taing

kdtaing621@gmail.com • 626-822-0137 • www.linkedin.com/in/kyle-taing-b89409223

EDUCATION

University of California, Riverside Riverside, California
B.S Computer Science Graduation March 2025

- Related Coursework: Data Structure and Algorithms, Design and Architecture of Computer Systems, Discrete Structures, Embedded Systems, Database Management System, Edge Computing, Designing Operating Systems, Artificial Intelligence, Software Testing, Big Data, Software Engineering, Compiler Design

TECHNICAL SKILLS

Languages: C++, C, JavaScript, Assembly, Unix, Python, SQL, Beast, Scala, Excel
Technologies/Framework: Github, Linux, Arduino, Apache Spark, MongoDB, Hadoop, Agile
Libraries: Pandas, Pytorch, TensorFlow, Pytorch, NumPy

PROJECTS

Crime Data Analysis|SQL/Python/Spark *March 2025*
Developed a large-scale crime data analysis pipeline using Apache Spark to process, analyze, and predict arrests in the Chicago Crimes dataset.

- Processed and transformed 100k+ Chicago crime records using Spark DataFrame API, spatial joins, and Parquet format, improving query efficiency by 5x.
- Conducted spatial and spatio-temporal analysis, generating crime heatmaps and visualizations in QGIS and Python.
- Developed a machine learning model using NLP techniques and logistic regression to predict crime-related arrests with measured precision and recall.

Game Rental Application|SQL/Java *June 2024*
Developed a console application to streamline the game rental process, providing customers with an easy experience for managing their rental activities.

- Implemented data structures enabling filtering through a catalog of 100+ game entries based on multiple criteria genre, platform, and rating.
- Provided real-time tracking information for rental orders, keeping customers informed about their rental status and history.
- Optimized queries cutting average rental processing time by 30% through targeted code profiling and query optimization.

Fruit Quality Detection |Nvidia Jetson Nano/Python *March 2024*
Developed an automated system for detecting and classifying the quality of fruits using image processing and machine learning techniques.

- Collected and curated a comprehensive dataset of fruit images, including various quality levels and types of defects.
- Designed and trained CNNs, optimizing models with TensorFlow and PyTorch, reducing training time by 30% through efficient use of Nvidia Jetson Nano's GPU capabilities
- Achieved 95% defect detection precision, identifying specific defects such as bruises, discoloration

BlackJack|C++/Git *January 2023*
Developed a console-based Blackjack game application, providing users with an immersive experience of playing and strategizing hands against an AI-controlled dealer.

- Designed and developed a deck of cards utilizing advanced data structures, ensuring efficient storage and retrieval of each card for optimal performance
- Implemented pivotal gameplay components such as hit, stand, double down, and split actions
- Collaborated within a 4-member agile team, participating in 5+ scrum meetings

CLUBS

Association for Computing Machinery *September 2021- Present*

- Coordinated 5 industry‑speaker seminars each drawing 60 attendees on average and expanding our professional network by 10%.
- Contributed to a variety of technical workshops, seminars, and coding challenges, fostering an environment of continuous learning and skill enhancement.
- Established a GitHub Actions CI pipeline to automatically build, test, and validate code changes