Will Huang

408-476-0458 | williamhuang.whh@gmail.com | github.com/williamhuang3 | linkedin.com/in/whuang03/

EXPERIENCE

Abbott | Fortune 500 June 2024 – Sep. 2024

Software Engineer Intern *Sunnyvale, CA*

- Built TensorFlow models for arrhythmia prediction, supporting early detection coverage on 700+ customer devices
- Deployed cloud-based Python and C# package used by 20+ stakeholders to Azure Databricks data lake for seamless data processing on 9M+ real-time Spark Streaming transmissions, improving data integrity for ETL pipelines
- Added Agile MLOps and CI/CD by automating unit tests and validation reports, increasing QA coverage by 15%
- Optimized Apache Spark jobs and ran complex SQL queries for model training sets and ad hoc data aggregation

Ultima Genomics | a16z Series D June 2023 – Sep. 2023

Software Engineer Intern *Fremont, CA*

- Refactored legacy ETL pipeline into modular OOP Python package, enabling independent reporting of 50+ QC metrics and reducing failures from sequential dependencies; cut generation time by 40% and enabled metric aggregation across multiple pipeline executions
- Led fix for signal detection issue affecting 30% of sequencers using A/B testing and my optimized QC pipeline to iterate on detection parameters, reducing resolution time by 70% and improving future system reliability
- Built AWS S3 storage manager to automate data pulls and minimize manual steps, reducing retrieval errors by 80%
- Packaged internal dashboard via PyPI with Docker-based CI/CD, streamlining QA-to-prod transitions for analytics tools

UCLA Association of Computing Machinery (ACM) Dec. 2022 – June 2023

Software Engineer Intern *Los Angeles, CA*

- Built PyTorch image classifier to detect 5 crop diseases with 97% accuracy and <5% false positives, enabling early detection in agricultural monitoring tools and reducing yield losses for stakeholders
- Developed modular training pipeline with Optuna and TensorBoard to automate hyperparameter tuning, accelerating experimentation cycles by 3x and improving reproducibility
- Expanded training dataset by 30,000+ synthetic samples via automated augmentation (torchvision), reducing model overfitting by 30% and boosting validation accuracy

PROJECTS

MatchaMatch | *Software Engineer* Feb. 2025 – Present

- Built a full-stack matcha recommendation platform using Next.js, MongoDB, and TypeScript, applying KNN vector modeling with dynamic feature weighting to personalize suggestions from a curated dataset of 100+ products
- Delivered a normalization pipeline for user profiles, improving alignment to user preferences by 60% in A/B testing
- Deployed on Vercel with real-time API integration, database seeding, GitHub Actions for CI, and modular backend logic enabling future features like community matcha submissions

Smart Split | *Software Developer* June 2024 – Present

- Developed a Next.js web application that uses a multimodal LLM pipeline to convert receipt/bill images into structured JSON data, enabling automated bill splitting for college students and reducing manual expense tracking by 80%
- Integrated Gemini 1.5 (Google Generative AI) API for efficient extraction and classification of receipt items
- Managed a scalable Firebase backend to manage user authentication, data storage, and real-time site updates
- Implemented dashboard with Chart.js for breakdowns of user expenses, increasing user-reported clarity by 45%

EDUCATION

University of California, Los Angeles Los Angeles, CA

B.S in Computer Science *2021 - 2025*

- **Relevant Coursework:** Data Structures, Algorithms, Systems Programming, Operating Systems, Distributed Systems, Databases, Machine Learning, Algorithms and Complexity, Linear Algebra, Data Engineering

TECHNICAL SKILLS

Languages: Java, Python, C++, C#, SQL, JavaScript, TypeScript, HTML, CSS
Frameworks & Tools: Next.js, React.js, Vue.js, .NET, Flask, Express.js, Tailwind CSS, PyTorch, Node.js
Cloud & DevOps: Docker, AWS, Azure DevOps, Kubernetes, Linux **Databases**: MongoDB, PostgreSQL, MySQL, Firebase