

Isaac Hong

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Software engineer with diverse expertise in object-oriented programming, full-stack software development, artificial intelligence, machine learning, and data analytics. Experienced leader and collaborative team player with a demonstrated ability to adapt, innovate, and deliver impactful solutions. Committed to leveraging technical expertise and a versatile skill set to drive projects that align with organizational goals. Fully prepared to contribute and make an immediate impact.

WORK EXPERIENCE

WesleyQuest Inc.

Seoul, South Korea

Data Analyst, Intern - Tech Consulting Services

July 2023 - September 2023

- Utilized Python libraries (**Pandas**, **NumPy**, **SciPy**, **SciKit**, etc.) to apply advanced **data analytics** and **predictive modeling** techniques, enhancing client consultations with solutions that aligned with the strategic goals of 20+ diverse businesses.
- Composed detailed **industry and market reports** that empowered the team to deliver data-driven recommendations.
- Effectively communicated technical information to non-technical team members and clients.
- Built dynamic **data visualizations** using Python (Matplotlib), improving clarity and client comprehension of complex data insights.

EDUCATION

University of California, Irvine

Irvine, CA

B.S. Computer Science

Graduated in 2024

- Relevant Coursework: Object-Oriented Programming (Python, Java, C/C++), Data Structures and Algorithms, Information Retrieval, Calculus, Statistics, Database Management, Artificial Intelligence, Machine Learning and Data Mining, Computer Networks, Computer Vision, Operating Systems, System Design, Software Testing and Quality Assurance, Human-Computer Interactions

PROJECTS

EcoLume

UC Irvine

Capstone Project

January 2024 - March 2024

- Developed an **end-to-end ML pipeline** that leverages satellite imagery and semantic segmentation to detect human settlements in sub-Saharan Africa, aiming to address energy access gaps and support informed policy-making.
- Designed and trained multiple **neural network** and **deep learning models**, including Segmentation Convolutional Neural Network (CNN), UNet, and UNet++.
- Preprocessed dataset and tuned hyperparameters using WandB statistics, leading to a **30% improvement** in model accuracy.
- Managed team workflows and progress through milestone tracking, resulting in a top-scoring final presentation.

Health Homie

UC Irvine

Class Project

January 2024 - March 2024

- Deployed a health and wellness **mobile application** that integrates dynamic user data, backend databases, and an adaptive recommendation engine to support sustainable lifestyle changes.
- Streamlined **backend integration** with Firebase, ensuring seamless real-time interactions and scalability for future development.
- Created a **user-friendly interface**, enhancing the application's usability and receiving positive feedback during user testing sessions.
- Adopted **CI/CD** and **Agile** principles, enabling rapid feedback incorporation and completion ahead of project deadlines.

TECHNICAL SKILLS

- Programming Languages: Python, Java, C, C++, C#, .NET, SQL, HTML/CSS, JavaScript
- Tools: Pandas, NumPy, Matplotlib, SciPy, Scikit-learn, PyTorch, TensorFlow, Jupyter Notebook, Firebase, Vim, Angular, Node, MySQL, Selenium
- Skills: Data Analytics, Machine Learning, Data Visualization, Natural Language Processing, Web Crawling