Sang In (Harry) Kang

Sik247@nyu.edu | (858) 214-4035 | https://github.com/sik247

Technical Skills

Coding: Python, Java, C, C++, MATLAB, **SQL**, R, NodeJS, Typescript

Frameworks: AWS, Azure, Docker, Django, Flask, Git, **KERAS**, MongoDB, OpenGL, **PyTorch**, React.js, Linux/Unix, **TensorFlow**

Education

New York University   **New York, NY**
Bachelor of Arts in **Computer Science** and **Economics** (GPA: 3.5/4.0)   *2024*
Coursework: Operating Systems, Algorithms & Data Structures, OOP, Software Engineering, Financial Accounting
Certificates: Career Essentials in Generative AI by Microsoft, Career Essential in Project Management by Microsoft

Professional Experience

New York University (Courant)   **New York, NY**
Undergraduate Researcher   *May 2023-Present*
- Pioneered the resolution of intricate challenges related to fluid-fluid and fluid-solid interactions using **C++** and **OpenGL**, achieving a significant **20% enhancement in fluid realism through advanced graphic simulations**.
- Engineered and implemented a highly efficient neighborhood search algorithm in **C++** to optimize particle simulations, addressing the challenge of identifying nearby particles within a specified interaction radius.
- Leveraged advanced data structures, including spatial hashing and grid-based indexing, to streamline the process of locating neighboring particles, significantly improving the algorithm's runtime efficiency.

iD Tech   **Seattle, WA**
Instructor of Machine Learning and Artificial Intelligence   *Jun 2023 – Aug 2023*
- Spearheaded Machine Learning (ML) and Artificial Intelligence (AI) instruction for a diverse cohort of 100+ students, leading projects focused on the recognition of handwritten digits using Convolutional Neural Networks (**CNNs**) on the MNIST dataset.
- Integrated **TensorFlow** and **PyTorch** extensively in data preparation, model creation, and evaluation, emphasizing a practical approach to align with industry standards.
- Introduced students to NLP concepts through a dedicated text analysis project utilizing TensorFlow to create and train **recurrent neural networks (RNNs)** and transformers, applying these models to tasks such as text classification and sentiment analysis.

The Fourth Effect   **New York, NY**
Product Engineer (Contractor)   *Jan 2023 – Mar 2023*
- Leveraged machine learning APIs to analyze subscriber data, leading to a **40% improvement in the accuracy of board seat matches** and increasing the likelihood of successful placements.
- Utilized statistical analysis techniques on subscriber data, identifying key trends and patterns that led to a **30% increase in successful board seat placements for women** with specific skill sets and industry backgrounds.
- Improved API endpoint usability based on Google Analytics user-behavior data, which led to a **50% increase in user interaction with the board-matching feature**.

L Korea Edu Group   **Seoul, KR**
Product Manager   *Jan 2021 – May 2023*
- Developed back-end logical structure of SaaS Learning Management System using **Django** and **Python**, providing streamlines educational resource access to 15K elementary/secondary students and 15 online high school institutions worldwide.
- Architected a **SQL** database that outputs a list of 20 college programs by recoding and analyzing statistical academic data such as the user's high school GPA, the number of AP courses, and intended area of study.

Odoo   **Seoul, KR**
Technology Consultant Intern   *Dec 2019 - Jan 2021*
- Forged a pivotal B2B collaboration with Odoo, a global unicorn enterprise boasting 800 million users. Secured exclusive rights to Odoo's intellectual property, empowering us to pioneer, execute, and oversee avant-garde open-source ERP and CRM solutions.
- Partnered closely with industry giants like Samsung Biologics, Mirae Asset, and Samsung Electronics to fine-tune ERP systems and API integrations achieving a transformative 40% reduction in manual data input.

Projects

Veritas Asset Management   **London, UK**
Software Engineer   *Nov 2023- Dec 2023*
- Developed and implemented a dynamic algorithm for short-term trading in the EUR/USD currency pair, achieving a 12% increase in returns compared to traditional buy-and-hold strategies over a six-month period.
- Designed and implemented a systematic risk management approach, including a stop-loss to take-profit ratio of 2, contributing to a 25% reduction in drawdowns and ensuring consistent profitability.
- Implemented a systematic approach to calculate position sizes, resulting in an average portfolio balance deviation of just 2%, contributing to enhanced stability and risk mitigation.

Marshall Wace X NYU Hack 2022   **New York, NY**
Software Engineer   *Feb 2022*
- Architected and deployed an advanced Black-Scholes option pricing algorithm using Python for Marshall Wace at NYU Hack 2022, enhancing derivative valuation accuracy by 30% and optimal option hedging for volatilities and price derivatives.

New York Wealth Planning Group   **New York, NY**
Business Development (Contract)   *Nov 2023- Dec 2023*
- Implemented and optimized strategies to leverage the network effect, resulting in a 15% increase in customer referrals and brand visibility in the healthcare department.
- Utilized advanced data analysis techniques such as regression analysis for predictive modeling and customer segmentation for market analysis cementing the firm as the #1 General Agent for UnitedHealthcare in 2022.