Juha Im

[LinkedIn](#) | [Github](#) | United Kingdom

Professional Summary

Graduate Software Engineer (MSc Advanced Computer Science, University of Manchester-Distinction predicted) with hands-on experience in Python, SQL, and data engineering. Skilled in building ETL pipelines, optimising databases, and applying deep learning models (BERT, CNN, VAE) to real-world NLP and computer vision tasks. Strong interpersonal and communication skills developed through 5 years of teaching, with proven ability to explain complex concepts clearly and work effectively in collaborative environments.

Education

MSc Advanced Computer science, *University of Manchester*   **September 2024-September 2025**
Result: Distinction(predicted)

- **Advanced knowledge of ML and AI**: linear models, neural networks, transformers, variational autoencoders.
- **Applied NLP techniques**: tokenisation, POS tagging, embeddings, NER, relation extraction.
- **Experience in computer vision and cognitive robotics**: CNNs, OpenCV, edge/object detection.
- MSc Thesis: *"Unsupervised Representation Learning for Spatial Transcriptomics"* – Applied generative models (VAE, transformers) to spatial omics data for classification and imputation tasks using Scanpy and CellPLM.

BSc Computer science, *Korea National Open University*   **March 2021-February 2023**
Result: 3.6/ 4.5 GPA, equivalent to a U.K 2:1 honours degree

- Developed a strong foundation in Computer Science, including Database Systems, Algorithms, Data Structures, Linear Algebra, Machine Learning, Cloud Computing, as well as Python and R.

Technical Skills

- **Languages:** Python, SQL, Git, C++, Java
- **Machine Learning:** Supervised & Unsupervised Learning, Deep Neural Networks, Generative AI, CNNs
- **Data Engineering:** ETL pipelines, JSON, XML, RDF/SPARQL, SQLite optimisation
- **Other:** OpenCV, SLURM, SCANPY, HPC

Projects

- **ETL Pipeline for Ad Data** - Developed an ETL solution transforming Twitter ad impressions (JSON) into a structured SQLite DB using Python, demonstrating skills in real-world data ingestion and transformation.
- **Object Recognition Systems** -Developed object recognition systems using both CNNs and traditional feature extraction methods (Harris corner detection and SIFT), and evaluated their performance on both CIFAR-10, STL-10.([Github](#))
- **Manifold Learning** - Implemented manifold learning methods such as cMDS, stress-based MDS, ISOMAP and LLE.
- **Relation Extraction (NLP)** - Compared the performance of BERT and LSTM models on the SemEval-2008 dataset for relation extraction, analyzing their effectiveness based on F1-score.

Experience

Jeonghyun Elementary School, South Korea-Elementary school teacher
September 2019-September2024

- Managed responsibilities in high-pressure settings with strong multitasking and time management.
- Delivered lessons to classes of 30+ students, demonstrating clear communication and adaptability.
- Built stakeholder-facing skills through regular communication with parents, students, and staff.
- Consistently received high performance evaluations (4.5+/5).