Jihun Song

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RESEARCH INTERESTS

- Large Language Models
- Natural Language Processing
- Retrieval-Augmented Generation

EDUCATION

Mar. 2023 ~ Present	**Soongsil University** School of AI Convergence *Advisor: Chanjun Park* *Bachelor Student* GPA: 3.94 / 4.5	Seoul, Korea

PROJECTS

- **Satellite Imagery-Based Industrial Emission Analysis | Data Creator Camp | Aug 2025 – Oct 2025**
  - Solved three computer vision missions using satellite data: chimney detection (object detection), chimney height estimation (regression), and industrial complex segmentation (semantic segmentation).
- **RAG Chatbot for Department Information | Soongsil University | May 2025 – Jun 2025**
  - Collected and chunked documents to generate OpenAI-based embeddings for retrieval-augmented generation.
  - The RAG-based system achieved an average F1-score of ~0.9 per question on domain-specific academic queries.
- **Transfer Learning for CIFAR-100 Image Classification | Soongsil University | May 2025 – Jun 2025**
  - Fine-tuned pre-trained CNNs with data augmentation and redesigned classifier heads.
  - Achieved 88% top-1 accuracy on CIFAR-100 using transfer learning with EfficientNet-B0 pretrained on ImageNet (original ImageNet top-1 accuracy: 77.7%).
- **Integration of Career Counseling Feature into AI Department Student App | Soongsil University | Dec 2024 – Feb 2025**
  - Developed an iOS interface and backend integrated server communication for scheduling Zoom-based counseling sessions.
  - Improved skills in user-centered UI design and client-server communication architecture.
- **Development of Algorithm Review Note using Baekjoon API | Soongsil University | Oct 2024 – Dec**

2024

- Built a full-stack review note platform using Spring Boot and MySQL with algorithm problem logging.
- Strengthened understanding of server-side development and API integration.

- **CNN-Based Food Image Classification for Nutritional Information Prediction | Soongsil University | Oct 2023 – Dec 2023**
  - Trained a CNN model to classify food images and predict nutritional attributes.
  - Understood the importance of visual feature extraction and proper labeling in image classification tasks.

WORK EXPERIENCES

- **Intern | DREAMTECH, Korea | Jan. 2025 – Feb. 2025**
  - Utilized OpenMV and MicroPython to develop and test embedded vision-based sensor modules.
  - Gained practical experience applying computer vision in real-world, resource-constrained environments.

SKILLS AND TECHNIQUES

- Languages: Python, C/C++, Java, SQL, Swift
- Tech Stack: PyTorch, iOS, Spring Boot, Mysql, github

RELEVANT COURSEWORK

- Advanced AI Mathematics (Spring 2024)
- Data Structures (Spring 2024)
- Algorithms (Fall 2024)
- Machine Learning (Fall 2024)
- Deep Learning Programming (Spring 2025)
- Artificial Intelligence (Spring 2025)