

Jun Seong Kim

📞 010-8375-7470 ✉️ 09jkim@kaist.ac.kr  [LinkedIn](#)  <https://junseongkim.com>

Education

Korea Advanced Institute of Science and Technology

Expected July 2025

Bachelor of Science in Computer Science, Double Major in Business and Technology Management

Daejeon, South Korea

- **Relevant Coursework:** Introduction to Human-Computer Interaction, Introduction to Software Engineering

Experience

Institute for Basic Science, Data Science Lab

Dec 2022 – Dec 2023 (Collaboration until March 2024)

Data Science (+Planetary Atmospheres) Internship

Daejeon, South Korea

- Created satellite data image pre-processing pipeline for enhancing atmospheric feature data (NetCDF, FITS) gathered from various Venus orbiters (Akatsuki, Venus Express).
- Aided in the development of Anomaly Detection techniques using various GAN/VAE-based models (PyTorch).
- Achieved 90% detection rate for required specific atmospheric formations to aid in gathering datasets for Planetary researchers.

Projects

Music Recommendation System | SpotiPy, PyTorch

Paper Available, 2023

- Developed a mood-adapted content-based filtering model for music recommendation using the Spotify API, leveraging a decision-tree mood-labeled song dataset and user listening histories.
- Contributed to the advancement of music recommendation systems by addressing the challenge of integrating emotional nuances into song selection, offering a more personalized and satisfying user experience.
- Conducted extensive evaluation using metrics such as hit rate and accuracy percentage, demonstrating the effectiveness of the mood-adapted model in aligning music recommendations with user preferences and emotional states.

Publications

Detecting Stationary Atmospheric Waves in Venus with a Self-Supervised Model [2]

Korea Software Congress (KSC), Dec 2023

Busan, South Korea

- Original title: "Detecting Stationary Atmospheric Waves in Venus with a Self-Supervised Adversarial Model Using Anomaly Detection."
- Awarded Grand Prize for Best Undergraduate Paper
- Authors: Jun Seong Kim, Husnu Baris Baydargil, Jose Eduardo Silva, Yeon-Joo Lee, Meeyoung Cha
- First author for a novel study on detecting stationary atmospheric waves on Venus using self-supervised anomaly detection model. Significantly improved results from previous KCC paper (See below) achieving AUC score of 90.81% and addressing issues raised in the former.

Detecting Stationary Atmospheric Waves in Venus with a Self-Supervised Model [1]

Korea Computer Conference (KCC), Jul 2023

Jeju, South Korea

- Original title: "Detection of Stationary Atmospheric Waves in Venus with a Self-Supervised Adversarial Model Using Anomaly Detection"
- Authors: Husnu Baris Baydargil, Jose Eduardo Silva, Jun Seong Kim, Yeon-Joo Lee, Meeyoung Cha
- First paper on Stationary Wave detection using a VAE-based model for anomaly detection. Achieving an AUC score of 78.37%

Technical Skills

Languages and Tools: (Proficient) Python, (Familiar) JavaScript, HTML, CSS, SQL, git

Design: Figma, Adobe [Photoshop, Premiere Pro, InDesign, After Effects]

Soft Skills: Proficient Korean and English Communication Skills