SANGMIN JUNG

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Interests

Generative Modeling, Vision Language Action, Affordances, Video Generation, World Models

EDUCATION

Arizona State University

Aug 2023 -

Ph.D., Computer Science (GPA 4.0/4.0)

Advisors: Professor Pavan Turaga, Professor Yezhou Yang

Relevant Coursework: Machine Vision and Pattern Recognition, Statistical Machine Learning, Knowledge Representation and Reasoning, Natural Language Processing, Data Mining

Kyungpook National University

Mar 2013 - Feb 2019

B.S., Mobile Engineering (GPA 3.85/4.3)

Relevant Coursework: C, JAVA Programming, Probability and Random Processes, Data Structures, Algorithms, Software Design, Operating Systems, Computer Graphics, Parallel Programming

Professional Experience

Bosch Research Research Intern

Sep 2025 -

Remote (Sunnyvale), CA

• Working as a Foundation Models based Autonomous Driving intern, leading a project on video generation model combined with RL to improve intelligent autonomous driving.

Samsung Electronics, Mobile Division

Mar 2018 - June 2023

 $Software\ Engineer$

Gumi, Korea

- Conceptualized, designed, and implemented a new automatic call issue detecting solution using Mel-frequency cepstral analysis and ML-based human perception estimation models
- Deployed the solution to Samsung's global posts including Vietnam and Brazil and reduced the cost of using 3rd-party proprietary voice quality tools to 50%
- Participated in projects such as Samsung Devices Over-the-Air configuration web server and autonomous GPS handling system.

PUBLICATION

- [1] Maitreya Patel*, **Sangmin Jung***, Chitta Baral, and Yezhou Yang. λ -ECLIPSE: Multi-Concept Personalized Text-to-Image Diffusion Models by Leveraging CLIP Latent Space. *Transactions on Machine Learning and Research* (TMLR) 2024
- [2] Sangmin Jung, Utkarsh Nath, Yezhou Yang, Giulia Pedrielli, Joydeep Biswas, Amy Zhang, Hassan Ghasemzadeh, Pavan Turaga. Guiding Diffusion with Deep Geometric Moments: Balancing Fidelity and Variation. *IEEE/CVF Conference on Computer Vision and Pattern Recognition 3rd Workshop on Generative Models for Computer Vision* 2025
- [3] **TBR.** Latent Memory Modeling for Interactive Video Generation.

Awards and Honors

- ASU Graduate College Travel Award 2025 (\$250)
- GSG Graduate Support Award 2025 (\$300)
- NSF Expand AI Award 2402650 2024 Present
- Samsung-KNU Undergraduate Fellowship (Full tuition scholarship awarded for academic years 2013, 2014, 2017, and 2018)

TEACHING EXPERIENCE

Teaching Assistant — CSE360: Intro to Software Engineering Fall 2023, Spring 2024 - Supported instruction for 300+ students across two semesters; coordinated with graders and UG-

TAs with Prof. Lynn Robert Carter.

Teaching Assistant — Advanced Software Programming

Sep 2017 – Dec 2017

- Led sessions on C/C++, data structures, and algorithms; mentored 7 students with biweekly meetings, assignment design, and Q&A support.

${\bf Student\ Mentor-Artificial\ Intelligence}$

Dec 2017

- Delivered lecture on image processing using Deep Learning for graduate students; led hands-on AI tutorials for undergraduates using TensorFlow.

SERVICES

Conference Reviewer

• ECCV 2024, WACV 2025, ICCV 2025

SKILLS

Programming Languages C, C++, C#, Java, Python

Machine Learning Juypter, NumPy, Pandas, PyTorch, Scikit-learn, TensorFlow

Others Android, AWS, Bash, Docker, Git, LaTeX Foreign Languages English, Korean (Fluent), Spanish (Novice)