

이상윤

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경력 사항

2021년 9월 ~ 현재	성공회대학교 미래융합학부	조교수
연구과제		
<ul style="list-style-type: none">비전-언어 기반 다중 객체 추적에 관한 연구 (성공회대학교, 2025년 9월 - 2027년 8월)행동 탐지의 실용화: 실시간 및 온라인 응용을 위한 2D CNN 활용 (성공회대학교, 2024년 8월 - 2025년 7월)영상 AI 기반 산업현장 작업자 위험상황 실시간 모니터링 기술 (중소벤처기업부, 2024년 7월 - 2026년 12월)명의도용 사고방지를 위한 요소 기술 개발 (시큐차트글로벌 주식회사, 2023년 5월 - 2023년 12월)Temporal Shifted Transformer를 이용한 상황 인지 다중 물체 추적 (성공회대학교, 2022년 8월 - 2023년 7월)포괄적 맥락 인식 기반 다중 물체 추적을 위한 AI 통합 기술 연구 (과학기술정보통신부, 2022년 3월 - 2024년 2월)		
2019년 3월 ~ 2021년 8월	삼성전자 삼성리서치 로봇센터	책임연구원
업무내용		
<ul style="list-style-type: none">로봇 인식을 위한 온 디바이스 AI 모델 개발인간-로봇 상호작용을 위한 소프트웨어 아키텍처 설계		
2018년 3월 ~ 2019년 2월	삼성전자 삼성리서치 동작제어랩	선임연구원
업무내용		
<ul style="list-style-type: none">자율주행을 위한 딥러닝 모델 개발센서 퓨전을 이용한 다중 물체 추적 개발		

학력 사항

2011년 9월 ~ 2018년 2월	연세대학교
<ul style="list-style-type: none">전기전자공학 박사지도교수: 김은태 (etkim@yonsei.ac.kr)학위논문: "Deep Neural Network based Discriminative Feature Learning and Its Application to Multiple Object Tracking"	
2007년 3월 ~ 2011년 8월	연세대학교
<ul style="list-style-type: none">전기전자공학 학사	

연구 실적 (주저자 한정)

논문 <ul style="list-style-type: none">S. Chun, S. Song, D. Lee, S. Lee, "StoneGAT: A Robust Fall Detection Framework via Skeleton-aware Graph Attention Networks," <i>International Journal of Control, Automation and Systems</i>, vol. 23, no. 12, pp. 3702-3713, 2025.S. Lee, "Feature Refinement With Vision State Space Modules for Tiny Object Detection," <i>Journal of Institute of Control, Robotics and Systems</i>, vol. 31, no. 7, pp. 797-801, 2025.M. Park, Y. A. Kim, H. Cha and S. Lee, "DeepCampus: A Campus Tour Mobile Application Using Deep Learning-Based Vision Technologies," <i>The Transactions of the Korean Institute of Electrical Engineers</i>, vol. 74, no. 1, pp. 127-134, Jan, 2025.S. Ryu, S. Hong and S. Lee, "Making TSM Better: Preserving Foundational Philosophy for Efficient Action Recognition," <i>ICT Express</i>, vol. 10, no. 3, pp. 570-575, Jun, 2024.S. Lee and S. Hong, "Extended Siamese Convolutional Neural Networks for Discriminative Feature Learning," <i>International Journal of Fuzzy Logic and Intelligent Systems</i>, vol. 22, no. 4, pp. 339-349, Dec, 2022.S. Lee and E. Kim, "Multiple Object Tracking via Feature Pyramid Siamese Networks," <i>IEEE Access</i>, vol. 7, pp. 8181-8194, Dec, 2019.

- **S. Lee**, M. Park and J. Baek, "Robust adaptive synchronization of a class of chaotic systems via fuzzy bilinear observer using projection operator," *Information Sciences*, vol. 402, pp. 182-198, Sep, 2017.
- **S. Lee**, S. Jang, M. Park and C. Yoon, "Circuit Modeling and Simulation for Thermoelectric Cooling System using Condensed Water," *Journal of Korean Institute of Intelligent Systems*, vol. 25, no. 2, pp. 161-167, Apr. 2015.
- **S. Lee**, H. Seo, C. Hyun and M. Park, "Fuzzy Disturbance Observer based Multiple Sliding Surface Control of Nonlinear Systems with Mismatched Disturbance," *Journal of Korean Institute of Intelligent Systems*, vol. 24, no. 4, pp. 385-391, Aug. 2014.
- **S. Lee**, M. Park, and J. Baek, "Modeling of Dynamic Hysteresis Based on Takagi-Sugeno Fuzzy Duhem Model," *International Journal of Fuzzy Logic and Intelligent Systems*, vol. 13, no. 4, pp. 277-283, Dec. 2013.

학술대회

- S. Hong, S. W. Kwak and **S. Lee**, "EMPOWERING TRANSFORMERS SPECTRALLY: TOWARDS COMPREHENSIVE PATTERN LEARNING FOR IMAGE DEMOIRÉING," in *Proc. of The 51th IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2026)*, Barcelona, Spain, May, 2026.
- S. Chun, S. Song, D. Lee and **S. Lee**, "StoneGAT: Skeleton-aware Graph Attention Networks for Robust Fall Detection from Single-frame Poses," in *Proc. of The 25th International Conference on Control, Automation and Systems (ICCAS 2025)*, Incheon, Korea, Nov, 2025.
- S. W. Kwak, S. Hong and **S. Lee**, "Making MambaVision Temporal: Leveraging TSM for Efficient Video Understanding," in *Proc. of The 24th International Conference on Electronics, Information, and Communication (ICEIC 2025)*, Osaka, Japan, Jan, 2025.
- **S. Lee** and S. Hong, "D-TSM: Discriminative Temporal Shift Module for Action Recognition," in *Proc. of The 20th International Conference on Ubiquitous Robots (UR 2023)*, Hawaii, USA, Jun, 2023, pp. 133-136.
- **S. Lee**, S. Hong and E. Kim, "Real-Time Tracking-by-Detection using

Deep Learning for Mobile Vision Applications," in *Proc. of The 18th International Symposium on Advanced Intelligent Systems (ISIS 2017)*, Daegu, Korea, Oct, 2017.

- **S. Lee**, J. Kim, S. Hong, B. Kim, D. Noh and E. Kim, "Semantic Segmentation Using Superpixel and Fully Convolutional Network," in *Proc. of The 32th Institute of Control, Robotics and Systems Annual Conference (ICROS 2017)*, Sokcho, Korea, May, 2017, pp. 31-32.
- **S. Lee**, S. Kim and E. Kim, "Control of Camera Optical Image Stabilization System using Command Shaping Techniques and Feedback Controller," in *Proc. of Conference on Information and Control Systems (CICS 2016)*, Danyang, Korea, Oct, 2016, pp. 13-14.
- **S. Lee**, H. Eum, S. Jang, M. Park and C. Yoon, "Design of Fuzzy Controller for Thermoelectric Cooling System using Condensed Water," in *Proc. of Korean Institute of Intelligent Systems Spring Conference 2015 (KIIS 2015)*, Ansan, Korea, Apr, 2015, pp. 159-160.
- **S. Lee**, S. Jang, M. Park and C. Yoon, "Cooling System Control Based on Fuzzy Look-Up Table Using Temperature Sensor," in *Proc. of Korean Institute of Intelligent Systems Fall Conference 2014 (KIIS 2014)*, Gangneung, Korea, Oct, 2014, pp. 70-71.
- **S. Lee**, J. Baek and M. Park, "Design of Dynamic Hysteresis Model based on T-S Fuzzy Duhem Model," in *Proc. of The 14th International Symposium on Advanced Intelligent Systems (ISIS 2013)*, Daejeon, Korea, Nov, 2013.

특허

- "ROBOT AND METHOD FOR CONTROLLING THEREOF", **KR** 10-2020-0172983, Dec, 2020.
- "METHOD OF ASSISTING AUTONOMOUS VEHICLE AND APPARATUS THEREFOR", **KR** 10-2018-0094612, **CN** 201980054390, **EP** 19850615, **US** 201916539312, Aug, 2018.

수상

- 2022 년도 성공회대학교 업적평가 우수상
- 2023 년도 성공회대학교 업적평가 우수상

학문 활동

심사위원	International Journal of Fuzzy Logic and Intelligent Systems
	The Journal of Korean Institute of Next Generation Computing
	Journal of Institute of Control, Robotics and Systems
	The Journal of Supercomputing
	International Journal of Control, Automation, and Systems
	Journal of Big Data
	ICT Express