Minsuk Jang

XYZ Innovation

Representative of XYZ Innovation

Linkedin:
linkedin.com/in/jadenjang/
Phone:
+82) 10-9908-2876
Email:
minsukjang@kaist.ac.kr

Research Interest

- Digital Twin
- 3D Vision (LiDAR, NeRF)

Education

- M.S in Engineering

  2025.2 ~Current. KAIST, Daejeon (Computational Intelligence Laboratory)

- B.S in Civil & Environmental Engineering AI Intensive
  2025.2. *Yonsei University. Seoul (GPA : 95.7/100)*
  Club : *Yonsei Drone(2023~ 2024.12, executive)*

Work Experience

- **Stellarvision Inc. (2024.7~2025.2)**
  - [RS - 2410005313] 딥러닝 기반 고속 SAR 분석을 위한 Edge 컴퓨팅 장비 개발
  - *Developing Digital Twin Method to Visualize Risk utilizing Drone, LiDAR*
  - *3D visualization of SAR, stereo images*

Patents

- "LiDAR 초소형 모바일 매핑 시스템 (LiDAR Micro Mobile Mapping System)" **Minsuk Jang**, KR Patent Application 10-2024-0130327 (2024)
- "산림 탄소 흡수량 분석 시스템 및 방법 (Forest Carbon Sequestration Analysis System and Method)" **Minsuk Jang**, KR Patent Application 10-2024-0153987 (2024)
- "무게중심 조정이 가능한 수직이착륙 무인항공기 (Vertically Takeoff and Landing Unmanned Aerial Vehicle with Adjustable Center of Gravity), Minjun Kim, Junkyoo Park, Jungha Wang, **Minsuk Jang**, KR Patent Application 10-2024-0177539 (2024)
- "디지털 표고모델로부터 고정밀 3D 모델을 생성하는 방법 (Method for Generating a High-Precision 3D Model from a Digital Elevation Model)", **Minsuk Jang**, Seungchul Lee, KR Patent Application 10-2024-0165631 (2024)
- "머신러닝 클러스터링 기반 위성영상 녹조 탐지 방법 (Machine Learning Clustering-Based Method for Algal Bloom Detection in Satellite Imagery)", **Minsuk Jang**, Seungchul Lee, KR Patent Application 10-2024-0165632 (2024)

Publications

- **Minsuk Jang**, Taehyeong Kim, Shiho Kim, *VisionCycle : Automation Labeling Pipeline Utilizing Neural Radiance Fields*, 대한전자공학회 하계학술대회
- **Minsuk Jang**, Halim Lee, Jiwon Seo, *Validating NeRF-Generated Point Clouds: A Comparative Study with KITTI Dataset for Accurate 3D Scene Reconstruction*, 한국항행학회 추계학술대회
- Taehyeong Kim**, Minsuk Jang**, Shiho Kim, *A method for Real Time Target Association in Smart Vessel's surround Camera System Using Geometric Relationships and SIFT Feature Point Detection*, 대한전자공학회 하계학술대회

Awards & Honor

대상, 제주 위성데이터 경진대회 (2024.9), 제주도청
- Machine learning-based green algae clustering pipeline, **Jeju Governor's Award**

최우수상, 연세대학교 교내창업 학내 데모데이 (2024.10) ,아산나눔재단
- **Forest survey automation** service using drones and 3D vision

서울시장상, 서울시 드론 활용 경진대회 (2024.12) , 서울특별시
- Measures to build a forest non-forest carbon monitoring system using **digital twin-based drones**

공학교육혁신센터장상, 연세대학교 수업 성과물 경진대회 (2024.7),연세대학교 공학교육혁신센터
- **Mobile LiDAR Scanner for Digital Twin, DepthViz**

우수상, 융복합적 사회문제 해결 경진대회 (2024.1) 연세대학교 사회과학대학
- Time-series analysis of the extent to which the presence of universities affects the development of cities

우수상, 경기도 ESG 해커톤 (2023.5), 경기도청
- Nonprofit foundation establishment project, social dining for developmentally disabled people

우수상, 학생참여 아이디어 경진대회 (2023. 7), 연세대학교
- Establishment of an ESG evaluation committee on campus

4 위, AI 드론 챌린지 (2024.5), 제 2 작전사령부, 인투스카이
- Flight plan for optimal landing point

장려상, 토목구조물 경진대회, (2024.12), 대한토목학회
- Smart city introducing a water-cooled data center benchmarked by Project Natick

Research Experience

Hyundai Motor Company
- (2023.12 ~ 2024. 6) Undergraude Research Intern Scholarship

Seoul National University, ARIL (Autonomous Robot Intelligence Laboratory)
- (2023.12 ~ 2024. 2), Undergraduate Intern

Seoul National University, VI Lab (Vehicle Intelligence Laboratory)
- (2024. 6 ~ 2024. 9), Undergraduate Intern

Yonsei University, Intelligent Unmanned Systems Labortory
- (2024. 9 ~ 2024. 12), Graduate Thesis Research

Skills

C

Python

ROS

CloudCompare

QGIS

Blender

Revit

Language

Korean (Native)

English (Fluent) , TOEIC 960(2023.08.27),

Other Project