

Jeongsik Park

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Education

University of Southern California	Master of Science, Computer Science (AI Specialization)	May 2026
University of Texas at Dallas	Bachelor of Science, Computer Science (GPA: 3.94)	May 2024

Technical Skills

AI	Python, PyTorch, LangGraph, LangChain, LLM, VLM, RAG, AI Avatar
DevOps	AWS, Docker, Kubernetes, Helm, Terraform, Prometheus, Grafana, Bash, Flask, FastAPI, REST API
Others	SQL, C, C++, Java, React, L ^A T _E X

Publications

- [1] (EMNLP 2025 Findings) **MemeInterpret: Towards An All-in-One Dataset for Meme Understanding**
J. Park., et al | Fine-Tuning (LLaVA, T5, CLIP), LLM-as-a-judge, PEFT (Quantization), Error-Analysis
- [2] (SIGdial 2024) **MemeIntent: Benchmarking Intent Description Generation for Memes** [link]
J. Park., et al | LLM/VLM, Evaluation (n-gram, embedding, human), Synthetic-data Generation, Data-Annotation
- [3] (under review) **Active Learning for Hate Speech Detection**
J. Park., et al | Active-learning, Data-mining, Rule-based ML, Fine-tuning (BERTweet)

Work Experience

General Electric – GE HealthCare	May 2025 – November 2025
AI Engineer Intern/Co-op	Bellevue, WA

- Building end-to-end autonomous X-ray exam environment to be showcased at RSNA 2025 [link].
- Orchestrating patient-instruction Agent and pose-detection VLMs, enforcing structured exam workflows using LangGraph and guiding patients to correct postures with adaptive feedback.
- Built LLM-as-a-Judge pipeline supporting async & batch inference, integrated structured output with LangChain, improving latency by 12× and reducing post-processing costs.
- Automated deployment of NVIDIA Digital Human Blueprint on AWS using Terraform (IaC), reducing setup time to 2 hours and enabling 5 team members to independently perform integration testing.
- Deployed containerized Riva Text-to-Speech via customized Helm charts and Kubernetes, cutting API expenses to zero.
- Enhanced AI avatar animation by aligning audio-to-face, collaborating with cross-functional UX design team, enhanced lip-sync and user-experience.
- Produced real-time monitoring dashboards with Grafana and Prometheus integration to track CPU/GPU utilization and network bandwidth/latency, ensuring stable performance in live exhibitions.
- Generated radiology reports by running inference with VLMs (Opus-4, GPT-4o, MedGemma) hosted on AWS Bedrock and Azure OpenAI using 2D DICOM X-ray and mammography images.
- Evaluated model-generated reports with RAG-as-a-Judge using predefined metrics, providing guidance for large-scale fine-tuning on 76TiB internal medical data.

Human Language Technology Research Institute	August 2022 – May 2025
NLP Research Assistant (Advisor: Dr. Vincent Ng)	Richardson, TX

- Led creation of the first unified computational meme understanding dataset with novel annotation pipelin, achieving state-of-the-art results in interpretation, explanation, and categorization.
- Introduced intent description generation task with background knowledge integration, boosting LLM/VLM meme interpretation performance by 43%.
- Proposed active learning approach for hate speech detection, addressing topic dependency while reducing annotation cost by 90% and surpassing SOTA models.
- Mentored 4 high school juniors on multimodal ML (CLIP/BLIP, OpenCV), resulting in co-authorship of research paper.
- Guided 5 undergrads in NSF REU program, supporting projects on LLMs, CNN/LSTM, TFR-BERT, and SVM.
- Designed ML project (Intro to ML. Honors), covering data augmentation and Question-Answering tasks.

Selected Activities & Honors

Conference Reviewer	AAAI 2026, ICASSP 2025	2025-2026
Branch Manager & Math Tutor	IntelliChoice (Volunteer)	2022-2024
National Science & Engineering Scholarship	Korea Student Aid Foundation (Full-merit)	2018-2023
Drill Assistant Instructor	28th Basic Training Center, ROK Army	2019-2021
International Student Creativity Challenge Contest	ICAST (Excellence, Fintech Platform)	2018
Startup Project Contest	KNU (2nd, Autonomous Lifeboat)	2018
SkillUp Hackathon	KNU (1st, Image Detection)	2018