

Claire Kim

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PhD candidate with AI/ML engineer experience, specializing in LLM inference systems, RAG, evaluation, and scalable production pipelines. Brings applied industry experience from Amazon, AMD, and federally funded research in trustworthy AI decision support.

EDUCATION

Arizona State University

2021 – Jul 2026

PhD, Computer Science

Tempe, AZ

- ◆ Data Mining & Machine Learning Lab
- ◆ Advisors: Dr. [Huan Liu](#) and Dr. [Mickey Mancenido](#)
- ◆ Funded by [DHS-CAOE](#)

Korea University

2013 – 2019

M.E., Computer Science & Engineering

Seoul, South Korea

B.S., Computer Science & Engineering

WORK EXPERIENCE

AMAZON

Sep – Dec 2025

Applied Scientist Intern

Bellevue, WA

- ◆ Improved production sentiment forecasting system for community operations using advanced ML models, increasing prediction accuracy and robustness at scale
- ◆ Designed and implemented an end-to-end pipeline from data collection to production-ready Python package deployment

AMD

Aug – Dec 2024, May – Aug 2025

AI/ML Intern

Austin, TX

- ◆ Reduced hallucination in LLM-based systems by 20% using retrieval-augmented generation and feedback-driven refinement
- ◆ Designed and implemented LLM evaluation and inference pipelines for scalable model deployment
- ◆ Built synthetic QA generation pipeline and LLM-as-a-judge system enabling automated evaluation at scale
- ◆ Improved multi-agent LLM system by incorporating user feedback signals to increase production reliability
- ◆ Optimized data and inference pipelines for efficiency, improving throughput and reducing evaluation latency

DHS-CAOE (Center for Accelerating Operational Efficiency)

May 2022 – Aug 2024

Graduate Research Assistant

Tempe, AZ

- ◆ Designed NLP models for topic modeling and text summarization using BERT and Llama-2-7b
- ◆ Collaborated with an interdisciplinary team to implement trustworthy AI-enabled decision support systems leveraging GPT-4
- ◆ Developed an interactive data analysis and visualization dashboard using NodeJS and Flask

ONR (Office of Naval Research Project)

Jan 2021 – Aug 2022

Graduate Research Assistant

Tempe, AZ

- ◆ Researched integration of online/offline COVID-19 datasets using topic modeling
- ◆ Analyzed 2M tweets for sentiment and stance detection in pandemic-related discussions

SELECTED PROJECTS

Reasoning-Level Fairness in LLMs (Ongoing)

- ◆ Investigating bias propagation in multi-step LLM inference and developing evaluation methods for fairness in reasoning processes
- ◆ Implementing scalable evaluation pipelines for analyzing fairness across large-scale generated outputs

Bayesian Learning based Uncertainty Measurement for Hallucination Mitigation (Ongoing)

- ◆ Design uncertainty-aware LLM system and developed evaluation workflows to demonstrate hallucination detection in practice

TECHNICAL SKILLS

- ◆ **AI/ML systems:** LLM/RAG workflows, LLM-as-a-judge systems, synthetic QA generation, multi-agent evaluation, hallucination mitigation, and trustworthy decision support.
- ◆ **ML engineering:** End-to-end data/model pipelines, model serving, and validation workflows
- ◆ **Platforms and languages:** AWS, GCP, Docker, LangChain, LlamaIndex, PyTorch, Transformers, Hugging Face, Python, SQL

SELECTED PUBLICATIONS | [Google Scholar](#)

- ◆ M. Cohen, **N. Kim** et al., PADTHAI-MM: A Principled Approach for the Design of Trustworthy, Human-Centered AI systems using the MAST Methodology **AI Magazine'25**
- ◆ **N. Kim** et al., Robust Stance Detection: Understanding Public Perceptions in Social Media **ASONAM'24**
- ◆ P. Salehi, Y Ba, **N. Kim** et al., Evaluating Trustworthiness of AI-Enabled Decision Support Systems: Validation of the Multisource AI Scorecard Table (MAST) **JAIR'23**
- ◆ L. Cheng, **N. Kim**, H. Liu, Debiasing Word Embeddings with Nonlinear Geometry **COLING'22**
- ◆ **N. Kim**, D. Mosallanezhad, L. Cheng, B. Li, and H. Liu, Bridge the Gap: the Commonality and Differences Between Online and Offline COVID-19 Data **SBP-BRiMS'22**

ACADEMIC SERVICE & TEACHING

- ◆ Reviewer at AMLC 2025 (Gen AI Evaluation Workshop) 2025
- ◆ Invited Reviewer for NeurIPS 2025 (Reliable ML Workshop) 2025
- ◆ Program Committee (PC) member of ASONAM 2024 conference 2024
- ◆ Invited talk at Machine Learning Day 2024, Arizona State University 2024
- ◆ Invited talk at SCAI AI Day, Arizona State University 2023
- ◆ Program Committee (PC) member of ASONAM, SBP-BRiMS 2023 conferences 2023
- ◆ Invited Reviewer for EMNLP 2023 conference 2023
- ◆ Reviewer at ECML-PKDD, ACM MultiMedia, ASONAM, and AAAI conferences 2022
- ◆ Volunteer at WSDM 2022 conference 2022
- ◆ Graduate Teaching Assistant, Object-Oriented Programming & Data Structures (ASU) 2022