Yunkyung Kim

Senior UX Designer
Amazon Robotics
+1 857.636.1951 / yunkkim@amazon.com

Education

KAIST, Ph.D. in dept. of Industrial Design — Daejeon, Korea
2/2008-2/2013

- Thesis title: Human-Robot Social Distance in Interaction Design for Robot Acceptance
- Product & Environment System Design Research Lab. Prof. Myung-suk Kim

Korea National Open University, Korea, BBA. In dept. of Business Administration — Daejeon, Korea
3/2010-2/2013

KAIST, B.S. in dept. of Industrial Design — Daejeon, Korea
3/2004-2/2008

Work Experience

***President,* Korean Robotics and AI New England Society (K-RAINES)** — Newton, MA
4/2025-Current

- Non-profit organization for Korean professionals working in the Robotics and AI fields

***Senior UX Designer,* Amazon Robotics** — North Reading, MA
8/2022-Current

- Designing for Ecosystem Resilience: The Systemic Model for Robot Issue Management
  - Led the systemic design to unify the fragmented “off-tool” ecosystem into a single, streamlined platform experience.
  - Partnered with System Architecture team to define and instrument technician performance data, optimizing troubleshooting flows and reducing Mean Time to Resolution.
- Shifting Paradigm: Defining North Star Vision for Robot Issue Management
  - Defined the North Star vision and experience outcome for robot issue management, driving alignment across Executive], Product, and Engineering leadership toward auto-recovery and minimal human intervention.
  - Established measurable success criteria to govern the product roadmap, ensuring all feature launches advanced the shift to a more autonomous system.
- Language of Robotics: Standardizing HMI and Scaling Design Excellence
  - Championed design excellence by architecting the HMI Design System and UX Design Pattern Guidelines for all robotic equipment, resulting in improvements to technician experience consistency.
  - Owned the design and standardization of Teach Pendant UI for complex, new generation robotic workcell, translating hardware constraints into a scalable interaction model.
- Human-Robot Interaction Design: Validating Non-Verbal HRI Cues
  - Developed interaction storyboards and design specifications for key human-robot collaboration scenarios, driving alignment between design and engineering team.
  - Led targeted user testing and validation studies focused on non-verbal communication, specifically assessing comprehension and trust in robot light pattern design.

***Principal UX Designer,* iRobot** — Bedford, MA
9/2020-7/2022

- Physical robot UX and mobile app UX design

***Senior. Human Factors Engineer, KBR,* NASA Johnson Space Center** — Houston, TX
7/2019-9/2020

- Joint Augmented Reality Visual Informatics System (JARVIS)

- Metrics Development for Methods for Human Factors Design and Evaluation of Habitat/Vehicle

***Human-Robot Interaction Designer*, SGT, NASA Ames Research Center** Moffett Field, CA
- Astrobee (https://www.nasa.gov/astrobee) *4/2016-7/2019*
- Robotic Allocation for Rovers

***Senior User Experience Designer*, SAMSUNG Electronics Co., Ltd.** Seoul, Korea
3/2013-3/2016

***Visiting Researcher,* University of Wisconsin-Madison.** Madison, WI
- Human-Computer Interaction Lab, dept. of Computer Science | Adviser: Prof. Bilge Mutlu *9/2011-12/2011*

***Visiting Researcher,* NASA Ames research center** Moffett Field, CA
- Exploration Ground Data System (xGDS) data exploration tool development *3/2011-8/2011*

Editorship & Academic Organization

Program Committee, International Conference on Human-Robot Interaction *2024-2026*

Associate Reviewer, IEEE RO-MAN *2017, 2019-2024*

Topic Editor, Contextualized Affective Interactions with Robots in Frontiers in Robotics and AI *2020*

Guest Associate Editor, Frontiers in Psychology *2020*

Review Panel, NASA Space Technology Graduate Research Opportunities (NSTGRO) 20 *2020*

Student Design Competition Chair, International Conference on Human-Robot Interaction *2020*