Kiyoon Kim

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EDUCATION

The University of Edinburgh
Edinburgh, United Kingdom
PhD in Informatics: Robotics, Computer Vision, Computer Graphics and Animation
Sep 2019 – Oct 2023

The University of Edinburgh
Edinburgh, United Kingdom
MSc in Artificial Intelligence
Sep 2018 – Aug 2019

Ulsan National Institute of Science and Technology (UNIST)
Ulsan, South Korea
Bachelor in Electrical Engineering, Computer Science and Engineering
Mar 2014 – Feb 2018

- **Contribution Award**[1]: Chairman's Award
- **GPA of major subjects**: 4.00/4.3 (96.0/100)
- **Total Grade Point Average**: 3.79/4.3 (93.9/100)

PUBLICATIONS

- <u>K Kim</u>, SN Gowda, P Eustratiadis, A Antoniou, RB Fisher, "Adversarial Augmentation Training Makes Action Recognition Models More Robust to Realistic Video Distribution Shifts", under review

- <u>K Kim</u>, D Moltisanti, O Mac Aodha, L Sevilla-Lara, "An Action Is Worth Multiple Words: Handling Ambiguity in Action Recognition", *33rd British Machine Vision Conference 2022, BMVC 2022*

- <u>K Kim</u>, SN Gowda, O Mac Aodha, L Sevilla-Lara, "Capturing Temporal Information in a Single Frame: Channel Sampling Strategies for Action Recognition", *33rd British Machine Vision Conference 2022, BMVC 2022*

- SN Gowda, L Sevilla-Lara, <u>K Kim</u>, F Keller, M Rohrbach, "A new split for evaluating true zero-shot action recognition", *DAGM German Conference on Pattern Recognition, 2021*

- M. S. Ryoo, <u>K. Kim</u> and H. J. Yang, "Extreme Low Resolution Activity Recognition with Multi-Siamese Embedding Learning," *AAAI Conference on Artificial Intelligence*, New Orleans, Louisiana, February 2018
  https://arxiv.org/pdf/1708.00999.pdf

- **Patent**: Falling out of hair management system
  https://patents.google.com/patent/KR20140094301A/en

EXPERIENCE

Innerverz Inc.
Seoul, South Korea
Image Generation AI Researcher & Developer
Oct 2023 –

- **Implement FP-LIIF (CVPR 2023 paper)**: Face segmentation technology using super-resolution
- **Stable Diffusion Personalization**: Research and develop DreamBooth and LoRA.

EgoVid Inc.
Ulsan, South Korea
Machine Learning Researcher & Developer
May 2016 – Dec 2017

- **Realtime Demonstration Running on Embedded Device at CVPR 2017**: Demonstrated my work running on NVIDIA Jetson TX2 and helped my colleague for implementing different demonstration about Video Anonymisation Algorithm at CVPR (Computer Vision Pattern Recognition) 2017 conference.
  https://youtu.be/7jkSum_pj9o?t=25s
- **UC Berkeley Entrepreneurship Programme**: Visited UC Berkeley Sutardja Center of Entrepreneurship & Technology for 9 weeks to exchange ideas about making a start-up company.
  UC Berkeley News Article: http://scet.berkeley.edu/keeping-personal-machine-learning-meets-egovid/
- **Attended Conferences**: AAAI Conference on Artificial Intelligence 2017, San Francisco, California, USA
  Asilomar 2016, Pacific Grove, California, USA
  Ubicomp 2016, Heidelberg, Germany

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[1]Students who have shown especially good behaviour or enhanced the university's honour can be given a contribution award. The contribution award winner shall be selected by deliberation of the Committee based on recommendations from the head of the school (department) in each school (department). In 2018, among 704 undergraduates from various departments, 6 people have been awarded.

- ○ **Linux ML Computing Server Setup and Maintenance**: Permissions, security, backup, scheduling, infrastructure, etc.
- **GitHub Projects (Terminal-based IDE)**
  Maintainer, Collaborator   *Dec 2022 – Mar 2023*
    - ○ **Nvim Treesitter Textobjects - 1.6k stars**: Query programming language syntax trees
    - ○ **Nvim Hand Gesture**: Webcam hand gesture recognition to control IDE
    - ○ **Jupynium - 296 stars**: Jupyter Notebook integration for NeoVim
    - ○ **Treemux**: File explorer in terminal (Tmux plugin)

Awards

- **NAVER UNIST Undergraduate Poster Award (NAVER UUPA)**   NAVER Corp., UNIST
  1st place: Poster presentation of Extreme Low Resolution Activity Recognition   *Dec 2017*
- **Korea Supercomputing Challenge (KSC 2015)**   KISTI Supercomputing Education Center
  5th place: MPI parallel computing competition   *Oct 2015*
- **HeXATHON (Hackathon)**   UNIST, NAVER Corp.
  1st place: QR code waiting system implemented with Raspberry Pi   *May 2015*
- **Korea International Science and Engineering Fair (KISEF 2012)**   National Science Museum
  Exhibited and Demonstrated PowerUpdater2 at Daejeon Convention Center.   *Jan 2012*
- **Korea Olympiad in Informatics (KOI 2011)**   National Information Society Agency
  Bronze medal: Demonstrated PowerUpdater2 (MFC, C++)   *Sep 2011*
- **PhD Full Funding & Stipend**
- **Bachelor's Degree Full Funding & Stipend**

Teaching Support

- **Marker of Introductory Applied Machine Learning**   The University of Edinburgh
  Marking coursework submissions for the MSc module.   *Oct 2020 – Jan 2021*
- **Demonstrator/marker of Advanced Vision**   The University of Edinburgh
  Ran lab sessions for the Advanced Vision (MSc module).   *Jan 2020 – May 2020*
- **Demonstrator of Machine Learning Practical**   The University of Edinburgh
  Ran lab sessions for the Machine Learning Practical (MSc module).   *Sep 2019 – Dec 2019*
- **Tutor of Object-Oriented Programming**   The University of Edinburgh
  Ran 2 tutorial sessions of OOP Java programming tutorials with Eclipse IDE.   *Jan 2019 – Apr 2019*
    - ○ Nominated for the **Best Student Who Tutors Award**
- **Tutor of Imperative Programming**   The University of Edinburgh
  Ran tutorial sessions of Java programming with Greenfoot IDE.   *Nov 2018*
- **Tutor of Engineering Programming I**   UNIST
  Ran tutorial sessions for 3 terms.   *Sep 2014 – Dec 2015*

Skills

- **Languages:** Python, C, C++, Lua, Linux Bash
- **Deep Learning:** PyTorch, Keras
- **Parallel Programming:** MPI, CUDA, PyTorch DDP (Distributed Data Parallel)
- **Tools:** Git, GitHub, Docker, Kubernetes
- **Research:** MATLAB, OpenCV
- **Embedded Computer:** NVIDIA Jetson TX2, Raspberry Pi (IoT)
- **Database & Website basics:** HTML, PHP, MySQL, Flash ActionScript, WordPress, XpressEngine
- **Others:** NXT Robot C, MFC (Windows App)

Languages

- **English**: Advanced: IELTS 7.5
- **Korean**: Native
- **Spanish**: Basic conversation