

MYEONGKYU LEE

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EDUCATION

Kookmin University

2021 - Present

- Master Candidate of Automotive and IT convergence
- Advisor: Ji Hyun Yang

GPA: 4.00/4.00

Kookmin University

2015 - 2021

- Bachelor of Automotive Engineering
- Cumulative rank: **1st** out of 166

GPA: 3.98/4.00

RESEARCH INTEREST

- **Human-Vehicle Interaction**
- **Driver Emotion**
- **Vehicle/Driver Safety**

RESEARCH EXPERIENCE (SELECTED)

Artificial Intelligence adaptation on the steering system (on going)

Seoul, S.Korea

Sponsored by Hyundai Motors Group

Sep 2021-August 2022

- Main role: Researcher

Development of take-over verification process from human point of view

Seoul, S.Korea

Sponsored by Hyundai Motors Group

May 2021-May 2022

- Main role: Researcher

Study of vehicle/physiological data according to driver state (real-vehicle)

Seoul, S.Korea

Sponsored by Hyundai Motors Group

Mar 2021-Nov 2021

- Main role: Researcher

Study of vehicle/physiological data according to emotion (simulator)

Seoul, S.Korea

Sponsored by Hyundai Motors Group

Mar 2020-Nov 2020

- Main role: Researcher

Study of drivers' behavior characteristics under danger situations

Seoul, S.Korea

Sponsored by National Forensic Service

Mar 2020-Dec 2020

- Main role: Researcher

Undetectable Communications for Drone Applications

CA, USA

Participated in research at UC Irvine, USA

Dec 2019-Feb 2020

- Main role: Research Assistance (led by Prof. Marco Leverato and Anas Alsoliman (Ph.D Candidate))

PUBLICATION AND PRESENTATION

1. Journal

- **M. Lee**, J. Choi, S. Kim, and J. Yang*, "Analysis of drivers' reactions to simulated jaywalking and application of AI classifiers to predict accidents", in preparation, Accident Analysis And Prevention. SSCI.
- **M. Lee**, S. Lee, S. Hwang, S. Lim and J. Yang*, "Effect of emotion on galvanic skin response and vehicle control data during simulated driving", under review, Transportation Research Part F: Traffic Psychology and Behaviour. SSCI.
- **M. Lee**, S. Kim, J. Kim and J. Yang*, "Simulator Study on the Response Time and Defensive Behavior of Drivers in a Cut-in Situation", accepted, International Journal of Automotive Technology. SCIE.

2. Proceedings

- **M. Lee**, S. Kim, D. Jeong, H. Lee, H. Park, H. Han and J. Yang*, "Simulator-based Study of the Response Time and Defensive Behavior of Drivers in Unexpected Dangers at an Intersection", submitted, Automotive UI'22, Seoul, Korea, September 17-20, 2022.
- H. Pyeon, H. Kim, Y. Bae, **M. Lee**, H. Zhu, J. Yang, S. Lim*, "Development of method to acquire Hands on/off answer value", Proceedings of 2022 Spring Conference of KSAE, Seoul, 02-03, June, 2022.
- **M. Lee**, H. Shim, S. Kim, J. Choi, J. Yang*, "Study of driver's response time in cut-in situation with driving simulator", Proceedings of 2021 Spring Conference of ESK, Seoul, 17-18, June, 2021.

SKILLS

Programming skills:

MATLAB/SIMULINK, Python, SPSS, R, HTML, CSS, Javascript, C, C++, LaTeX, SCANeR Studio
Carmaker, Prescan

Languages:

Korean(native), English(fluent)

ACADEMIC ACHIEVEMENTS

- **Golden Award** - 2021 BK 21 program poster competition, 2022.
- Graduated **1st** in Automotive Convergence college of Kookmin University, 2021.
- Grade Scholarship: All Semester in undergraduate

MISCELLANEOUS

- 2022 AUTO UI Committee member (local chair)
- Military Service (Sergeant) (2016-2017)