Seong Hyeon Park

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EDUCATION

Hanyang University

Seoul, Korea

Master of Science in Electrical Engineering (expected Aug 2020).

Mar 2018 - Present

Hanyang University

Seoul, Korea

Bachelor of Science in Electrical Engineering; GPA: 4.11/4.50, Summa cum laude.

Mar 2012 - Feb 2018

RESEARCH EXPERIENCE

Carnegie Mellon University

Pittsburgh, PA, USA

Visiting Student (Advisor: Prof. Jaime Carbonell)

Aug 2019 - Feb 2020

- Research Project: Diverse and Admissible Trajectory Forecasting through Multimodal Context Understanding. The paper [PP1] won "Honorable Mention" in Argoverse Motion Forecasting Challenge @ CVPR 2020 Workshop on Autonomous Driving and is submitted to ECCV 2020.
- Courses: Computer Vision, Machine Learning for Text Mining, etc.; GPA 4.0/4.0

Signal Processing & Artificial Intelligence Lab., Hanyang University

Seoul, Korea

Researcher (Advisor: Prof. Jun Won Choi)

Mar 2018 - Jul 2019

- **Trajectory Forecasting**: Developed a deep learning model for vehicle trajectory prediction. The results are published as a conference paper [C1] and registered as a patent [P1].
- **Signal Processing**: Developed Python codes for on-vehicle radar and lidar data filtering and association in real-time driving data acquisition system.
- National Research Projects: Participated in two national research projects (described in PROJECTS section).

PROJECTS

- Technology Innovation Program (NTIS #1415158637): Development of deep learning-based future prediction and risk assessment technology considering inter-vehicular interaction in cut-in Scenario. National research project.
- Global Creative SW Program (NTIS #1711058611): Development of intelligent interaction technology based on context awareness and human intention understanding. National research project.

Publications (Pre-Prints, Conferences, and Patents)

[PP1] Seong Hyeon Park, Gyubok Lee, Minseok Kang, Jimin Seo, Manoj Bhat, Ashwin Jadhav, Jonathan Francis, Paul Liang and Louis-Philippe Morency. "Diverse and Admissible Trajectory Forecasting through Multimodal Context Understanding ." In arXiv 2003.03212.

[C1] Seong Hyeon Park, Byeongdo Kim, Chang Mook Kang, Chung Choo Chung and Jun Won Choi. "Sequence-to-Sequence Prediction of Vehicle Trajectory via LSTM Encoder-Decoder Architecture." In IEEE IV, 2018 (Oral session for the selected 5%).

[P1] Seong Hyeon Park, ByeongDo Kim and Jun Won Choi. "Vehicle Trajectory Prediction Technique via Modularized Recurrent Neural Network Architecture." Korean patent 2019. (DOI 10.8080/1020180057025)

Professional Activities

Journal Reviewer: IEEE Transactions on Intelligent Transportation Systems, IEEE Transactions on Big Data, Elsevier Neurocomputing

AWARDS AND SCHOLARSHIPS

- [A1] Honorable Mention (Argoverse Motion Forecasting Challenge), 2020.
- [A2] Academic Excellence Award (Hanyang University), 2018.
- [S1] Kwanjeong Educational Foundation, 2018 2020.
- [S2] BK21 (Korean Government), 2018.
- [S3] Korea Semiconductor Industry Association, 2017.
- [S4] Hanyang Alumni Association (Department of Electrical Engineering), 2017.