

# Tae-hyoung Kim

ML / DL Engineer  
iMediSync, Inc  
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## EDUCATION

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Mar. 2019 ~ Feb. 2021	<b>Ulsan National Institute of Science and Technology</b> Department of Biomedical Engineering  Thesis: Decoding Single Pitch Imagery from the Human EEG <i>Advisor: Sung-Phil Kim</i>  <i>M.S. in Biomedical Engineering</i>	Ulsan, Korea
Mar. 2015 ~ Feb. 2019	<b>Ulsan National Institute of Science and Technology</b> School of Electrical Engineering  <i>Advisor: Sung-Phil Kim</i>  <i>B.S. in Electrical and Computer Engineering</i>	Ulsan, Korea

## RESEARCH INTERESTS

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- Brain signal processing
- Machine learning
- Deep learning
- Heart rate variability
- Automatic Speech Recognition (ASR)

## RESEARCH EXPERIENCES

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- Research Intern at Music and Audio Research Group (MARG), Seoul National University (SNU), Korea (Dec. 2017 ~ Feb. 2018) / ML & DL researcher
- Researcher at Research Team, iMediSync. Inc, Korea (Feb. 2021 ~ Present) / Researcher (EEG & HRV Modeling)

## PROJECTS

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- Development of Neural Information Processing Systems for Real-time Movement Control Integrated with Somatosensory Feedback, National Research Foundation of Korea (NRF), Korea (Apr. 2018 ~ Jan. 2019)
- Active and Adaptive Intelligence in Natural Brain and its Application to AI, National Research Foundation of Korea (NRF), Korea (Jan. 2019 ~ Dec. 2019)

- Art Nouveau, Decoding Inner Music Using Electrocardiography, Samsung , Korea (Dec. 2019 ~ Feb. 2021)
- Early screening model for depression using EEG, iMediSync, Korea (Feb. 2021 ~ Present)
- Stress modeling using PPG signal, iMediSync, Korea (Sep. 2021 ~ Present)

## SKILLS AND TECHNIQUES

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- Neural data analysis (Spike, ECoG, EEG, Calcium imaging) / Modeling
- Heart Rate Variability(HRV) & PPG data analysis / Modeling
- Statistical data analysis
- ML / DL
- MATLAB, Python, C++, R, Arduino, Pytorch
- Natural Language processing

## CERTIFICATE

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- 국가공인 데이터 분석 준전문가 (ADsP), 한국데이터산업진흥원 (K-data), Korea (Jun. 2020)

## INTERNATIONAL CONFERENCE

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- Society for Neuroscience (SfN) 2019, Chicago
- CES Show 2022, Las vegas