CURRICULUM VITAE

Joo Young Kim May 06, 2021

PERSONAL INFORMATION:

Work Home

Address: 222 Wangsimni-ro Address: 459-18 Deongneung-ro

Seongdong-gu, SEOUL 04763 Nowon-gu, Seoul 01769

Email: jykim1026@hanyang.ac.kr

Website: jooyoungkim.info

Citizenship: Republic of Korea

PhD candidate and Technical Research Personnel in the Biomedical Engineering Department at Hanyang University, South Korea.

I work with Professor In Young Kim in the Smart Ubiquitous Healthcare Lab.

I completed my B.S. in Biomedical Engineering at Hanyang University and can handle most bio-signals and medical images. In particular, I can design the whole systems for electrical bio-signals, including hardware design, firmware coding and analysis.

Through the analysis of bio-signals and medical images, I have become interested in computer science and have a need for related research. So, we created an A.I. team in the lab and I am currently working on this team, doing CNN and RNN based research.

EDUCATION AND PROFESSIONAL APPOINTMENTS

EDUCATION:

2016-Present Ph.D. candidate, Biomedical Engineering, Hanyang University, Seoul, Korea

Supervisor: Dr. In Young Kim

2012-2016 B.Sc. Biomedical Engineering, Hanyang University, Seoul, Korea

HONORS, AWARDS:

2017 Best Paper Award The Korean Society of Medical & Biological Engineering

RESEARCH

RESEARCH EXPERIENCE:

2016-Present Graduate Research Assistant, A.I. team, Smart Ubiquitous Healthcare Lab.,

Biomedical Engineering, Hanyang University, Seoul, Korea

2015-2016 Undergraduate Research Intern, Hearing team, Smart Ubiquitous Healthcare Lab.,

Biomedical Engineering, Hanyang University, Seoul, Korea

2017-Present Research Assistant, Smart Healthcare & Device Research Center,

Samsung Medical Center, Seoul, Korea

MAJOR AREAS OF RESEARCH INTEREST

Machine learning and deep learning in medical image

Biomedical engineering, Computer science, Electrical engineering

PUBLICATIONS:

REFEREED JOURNAL ARTICLES: * lead author; ^ co-author

- 1. <u>Kim, J. Y.*</u>, Ro, K., You, S., Nam, B. R., Yook, S., Park, H. S., ... & Kim, I. Y. (2019). Development of an automatic muscle atrophy measuring algorithm to calculate the ratio of supraspinatus in supraspinous fossa using deep learning.
 - Computer Methods and Programs in Biomedicine,, 182, 105063.
- Kim, J. Y.*, Nam, K. W., Lee, J. C., Hwang, J. H., Jang, D. P., & Kim, I. Y. (2018). Scalp tapping-based protocol for adjusting the parameters of binaural hearing aids. *Biomedical Signal Processing and Control*, 45, 91-97.
- 3. You, S., Cho, B. H., Yook, S. Kim, J. Y.^, Shon, Y. -M, Seo, D. -W., Kim, I. Y. (2020). Unsupervised automatic seizure detection for focal-onset seizures recorded with behind-the-ear EEG using an anomaly-detecting generative adversarial network, *Computer Methods and Programs in Biomedicine*, 193, 105472
- 4. Kim, D. Y., Kwon, J., Kim, J. Y., Cha, H. S., Kim, Y. W., Kim, I. Y., & Im, C. H. (2018). New Method for Pure-Tone Audiometry Using Electrooculogram: A Proof-of-Concept Study. **Sensors**, 18(11), 3651.
- 5. So, S., You, S. M., <u>Kim, J. Y.^</u>, An, H. J., Cho, B. H., Yook, S., & Kim, I. Y. (2018). Development of Age Classification Deep Learning Algorithm Using Korean Speech. *Journal of Biomedical Engineering Research*, 39(2), 63-68.
- Kim, J.*, Lee, S., Kim, K., Cho, K., You, S., So, S., ... & Kim, I. Y. (2017).
 Development of Bone Metastasis Detection Algorithm on Abdominal Computed Tomography Image using Pixel Wise Fully Convolutional Network.
 Journal of Biomedical Engineering Research, 38(6), 321-329.