



김민정 전임연구원
Minjung Kim, MS
Division of Biotechnology

Office: R4-813

Phone: + 82-53-785-4679

Email: heroine@dgist.ac.kr

Lab: NeuroMuscular Systems Laboratory

Website:

Research Interests

- Computational neuroscience
- Neuroinformatics

Education

- 2015: DGIST (M.S. in Robotics)
- 2013: Yeungnam University (B.S. in Computer Eng.)

Professional Experience

- 2015-Present: Researcher, DGIST, Korea

Introduction to Research

Mammalian Neuromuscular System input-output is non-linear and its experiments are very difficult to set up and have limitation of the range of investigation and analysis, so it is needed to implement that on virtual environment by computational approach. We constructed physiologically plausible computationally efficient mammalian Neuromuscular System model in the level of cell (motor unit) and we will progressively extend it toward system level. We implement this virtual Neuromuscular System by using Python programming language and simulate it in physiologically valid range of model parameters and various inputs.

Research Publication (selected)

1. Kim, H., & Kim, M. (2018). PyMUS: python-based simulation software for virtual experiments on motor unit system. *Frontiers in neuroinformatics*, 12, 15.

Patents (selected)

- 1.

Technology Transfer

- 1.

Awards & Honors (selected)

- 1.