

Dr. Jiwoong Kim

## Medical Science & Machine Learning

6. Park, Y., Shin, N., Chung, S., Lim, S., Lee, P., Kee, S., **Kim, J.** (2019) \MRI-visible perivascular spaces in basal ganglia predict cognitive decline in Parkinsons disease." *Movement Disorders*, **34(11)**: 1672{1679
7. Choi, Y., Nam, Y., Lee, Y., **Kim, J.**,..., Jeon, S.\IDH1 mutation prediction using MR-based radiomics in pretreatment glioblastoma: comparison between manual delineation and fully automated deep learning-based approach of tumor segmentation." *European Journal of Radiology*, DOI:10.1016/j.ejrad.2020.109031
8. Choi, Y., Jang, J., **Kim, J.**, Nam, Y., Shin, N., Ahn, K., Jeon, S., Kim, B. (2020) \MRI and Quantitative Magnetic Susceptibility Maps of the Brain after Serial Administration of Gadobutrol: A Longitudinal Follow-up Study." *Radiology*, **297(1)**:143-150
9. Choi, Y., Nam, Y., **Kim, J.**,...,Shin, N. (2020) \MRI-visible dilated perivascular spaces in healthy young adults: A twin heritability study." *Human Brain Mapping*, **41(18)**:5313-5324
10. Lee, Y., Chang, H., Kim, S., Yang, M.,..., **Kim, J.**, Yoon, J., and Ye, Y. (2020) \Psychological distress in patients with anaphylaxis." *Allergy, Asthma, & Immunology Research*, **12(3)**:496-506
11. Ye, Y., Kim, S., Yang, M., Koh, Y., Kang, H., Choi, J.,..., **Kim, J.** (2020) \Health-related utility of EQ-5D in Korean adults with chronic urticaria: mapping from urticaria outcome measures." *Allergy, Asthma, & Immunology Research*, **12(4)**:599-607
12. Bak, Y., Nah, Y.,..., **Kim, J.**, Shin, N. \Neural correlates of empathy for babies in postpartum women: A longitudinal study." (2021) *Human Brain Mapping* **42(10)**:3295-3304
13. Park, KS., Choi, Y., **Kim, J.**, ..., Kim, M. (2021) *Scienti c Reports* Prognostic value of MRI-measured tumor thickness in patients with tongue squamous cell carcinoma. 11, 11333.

## Works In Progress

1. **Kim, J.**, Yang, J., Wang, J. \Prediction of chromatin interactions and expression quantitative trait loci based on Bayesian approaches."
2. **Kim, J.**, Koul, H. \A fast algorithm for some minimum  $L_2$  distance estimation and their application to image segmentation."
3. Kim, Jiwoong. \A goodness-of- t test for the Cauchy distribution with unknown location and scale parameters." (*Submitted to Metrika*)
- 4.

Published Software and Packages	R-packages	
	<ul style="list-style-type: none"> <li>Buddle: deep learning for classification, regression, and time series.</li> <li>KoulMde: minimum distance estimation.</li> <li>GofKmt: a goodness-of-<math>t</math> test via Khmaladze martingale transformation.</li> <li>HMMEsovler: a solution for the generalized linear mixed model.</li> </ul>	
	Stand-alone academic software	
	<ul style="list-style-type: none"> <li>KanekiGun: Graphic User Interface of MATLAB for time-series analysis.</li> <li>GameMax: Calculating the Nash equilibrium for various game theory models.</li> </ul>	
Teaching Experience	University of South Florida	
	<ul style="list-style-type: none"> <li>STA 4123 - Introduction to Mathematical Statistics</li> </ul>	Spring 2022
	University of Notre Dame	
	<ul style="list-style-type: none"> <li>ACMS 10145 - Statistics for Business and Economics I</li> </ul>	Spring 2017
	Michigan State University	
	<ul style="list-style-type: none"> <li>STT 315: Intro Prob &amp; Stat for Business</li> <li>STT 200: Statistical Methods</li> </ul>	<ul style="list-style-type: none"> <li>Summer 2015, 2016</li> <li>Summer 2013</li> </ul>
Presentation	2020 Statistics Seminar Series, Chonnam University	September 2020
	2020 Statistics Seminar Series, Chunnam University	July 2020