Joonho Bae

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Room 4217, E2-1, 291, Daehak-ro, Yuseong-gu, Daejeon, Republic of Korea

EDUCATION

Korea Advanced Institute of Science and Technology   2017 - Present
M.S. Candidate in Industrial & Systems Engineering

Seoul National University   2009 - 2016
Bachelor of Science in Statistics, Minor in Financial Economics

RESEARCH INTERESTS

Methodology
Statistical Machine Learning, Stochastic Processes
Nonparametric regression, Dynamic Tensor analysis,
Change-point Detection

Domain
Mobile Application Usage Modelling, Leisure Activity Modelling,
Anoamly Detection in Sensor Data

PUBLICATION

[1] (Submitted) **Bae, J.**, Park, J., Choi, J. Nonparametric Bayesian Dynamic Tensor Factorization.

[2] (Submitted) Frequency-based Anomaly Detection via Multi-output Log Gaussian Cox Process

[3] (Submitted) Detecting a Change in Relationship Status using Smartphone: From a Single to a Couple

CONFERENCE PRESENTATIONS

[1] The Recommender System for Mobile Apps, *2018 Global Marketing Conference*, Tokyo, Japan.

[2] Frequency-based Anomaly Detection via Multi-output Log Gaussian Cox Process, *2018 Stochastic Processes and their Applications*, Gothenburg, Sweden.

[3] Detecting a Change in Relationship Status using Smartphone: From a Single to a Couple, *INFORMS Annual Meeting 2018*, Phoenix, AZ.

[4] Frequency-based Anomaly Detection via Multi-output Log Gaussian Cox Process, *INFORMS Annual Meeting 2018*, Phoenix, AZ.

WORK EXPERIENCE

SK TELECOM   2016 - 2017
Marketing Manager
Managed retail stores

SK TELECOM   2015
Marketing Intern
Revised manual

CHAM SON GIL Cooperative   2013 - 2014
Project Manager
B2B / B2C strategies

Department of Statistics, Seoul National University   2012 - 2013
Research Intern
   Developing/Revising KESS
    (Korean Educational Statistics Software : Excel VBA software)
  Advisor : Professor Sinsup Cho

HHC, 8th U.S.ARMY   2010 - 2012
Sergeant
  Serviced in military

AWARDS& HONORS

KOSAF FELLOWSHIP   2009 - 2014
  National Scholarship For Science & Engineering, KOSAF

SOCIAL VENTURE IDEA   2014
  Ministry of Employment & Labor, Republic of Korea

SK SOCIAL ENTERPRISE   2013
  SK Happiness Foundation

ARMY COMMENDATION MEDAL   2012
  8th U.S.ARMY

RESEARCH PROJECTS

SAMSUNG HEAVY INDUSTRIES   2018 Present
  Dynamic modeling smart ship system based on sensor data

TNS GLOBAL   2017 Present
  Modeling mobile app usage based on log data

TEACHING EXPERIENCE

IE 241 Engineering Statistics 1   2018 Spring
  Lecturer of two discussion sessions

LANGUAGES

Korean : Native
English : Advanced
Programming Language : Python, C, Matlab
Statistical Softwares : R, SAS, Excel VBA

COURSES

2017 Spring
  IE 632 : Stochastic Modeling I
  IE 661 : Applications of AI/Data Mining Technology
  EE 531 : Statistical Learning Theory
2017 Fall
  IE 539 : Convex Optimization
  EE 827 : Bayesian Estimation and its application
  EE 837 : Deep Learning for Computer Vision
2018 Spring
  IE 801 : Game Theory with Engineering Applications
  EE 807 : Mathematical Foundation of Reinforcement Learning