Eunseong Bae

Ph.D. Candidate, Department of Statistics
University of California, Davis
esbae@ucdavis.edu   eunseongbae.github.io   Updated: Feb 2, 2026

Research interests

- Manifold learning, Spectral analysis of random matrices, Asymptotic statistics

Education

- Ph.D. Candidate, Statistics, University of California, Davis, CA, USA, 2019-Present
- M.S., Statistics, Seoul National University, South Korea, 2019
- B.S., Mathematical Sciences, Seoul National University, South Korea, 2014

Work Experience

- Associate, Actuarial and Risk Management Team, Samsung Life Insurance, 2014-2016

Teaching Experience

- Teaching Assistant, University of California, Davis, 2019-Present
  - Graduate: Mathematical Statistics, Applied Statistics
  - Undergraduate: Elementary Statistics, Mathematical Statistics, Applied Statistics
- Teaching Assistant, Seoul National University, 2017
  - Undergraduate: Elementary Statistics

Publications

- Preprints:
  - **Bae, E.**, Polonik, W., 2026. Asymptotic expansions for spectral convergence of compact self-adjoint operators on general spectral subsets, with application to kernel Gram matrices. https://arxiv.org/abs/2602.00999
  - **Bae, E.**, Polonik, W., 2026. Kernel smoothing on manifolds. https://arxiv.org/abs/2601.16777
- Published:
  - Kim, J., **Bae, E.**, Kim, Y., Lim, C.Y., Hur, J.-W., Kwon, J.S., Lee, S.-H., 2022. A robust multivariate structure of interindividual covariation between psychosocial characteristics and arousal responses to visual narratives. PLOS ONE 17, e0263817. https://doi.org/10.1371/journal.pone.0263817
  - **Bae, E.**, Hur, J.-W., Kim, J., Kwon, J.S., Lee, J., Lee, S.-H., Lim, C.Y., 2020. Multi-group analysis using generalized additive kernel canonical correlation analysis. Sci Rep 10, 12624. https://doi.org/10.1038/s41598-020-69575-x

Awards

- Teaching Recognition Award, Department of Statistics, UC Davis (2021; 2023)