Nam-Hwui (Nam) Kim

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Employment

- Evaluation Consultant, University of Waterloo, June 2018 to present.
  - Provided consulting for multiple faculties within the university on student success initiatives
  - Revamped the university-wide tutor matching system
  - Hosted training workshops for undergraduate math tutors

- Sessional Lecturer, University of Waterloo, May 2018 to August 2018.
  - Instructor for STAT 230: Probability, an introductory probability course for math majors
  - Overall instructor rating: 4 out of 5

Education

- Ph.D. in Statistics, University of Waterloo, September 2018 to present.
  - *Topic*: Methods for Parsimony and Interpretability in Finite Mixture Models
  - *Supervisor*: Dr. Ryan P. Browne
  - *Expected Completion*: Spring 2022
- M.Math. in Statistics, University of Waterloo, September 2017 to August 2018.
- B.Math. in Statistics, University of Waterloo, September 2013 to August 2017.

Selected Awards

- Int'l Doctoral Student Award, University of Waterloo, 2018 to present.
- Graduate Research Studentship, University of Waterloo, 2018 to present.
- Department Chair's Award, University of Waterloo, 2018 to present.
- Int'l Masters Student Award, University of Waterloo, 2017 to 2018.

Community-building and Service

- Peer reviewer, *Stat*.
- Co-founder and VP Public Relations, *Statistics Anti-Depression (SAD) Club*, January 2018 to present.
  - Student-led initiatives promoting mental health of graduate students in the department. Programs include game nights, book purchases and end-of-term gatherings.

- VP Events, *UW Mathematical Finance Student Association*, September 2014 to September 2015.
  - Organized various events and tutorials for undergraduate students interested in mathematical finance as a field and/or a major for their degree.

Research and Scholarship

Research Areas: Model-based Clustering; Computational Statistics; Interpretable Methods; Dimension Reduction; Statistics Education.

Journal Articles
Published

1. Kim N.-H., and Browne R.P. (2021). In the pursuit of sparseness: A new rank-preserving penalty for a finite mixture of factor analyzers. *Computational Statistics and Data Analysis* 160: 107244.

2. Kim N.-H. and Browne R.P. (2021). Mode merging for the finite mixture of t-distributions. *Stat* 10(1): e372.

3. Kim N.-H. and Browne R.P. (2019). Subspace clustering for the finite mixture of generalized hyperbolic distributions. *Advances in Data Analysis and Classification* 13(3): 641-661.

Submitted

- Kim N.-H., Browne R.P. (Resubmitted with revision October 2021). Anderson relaxation test for selecting the intrinsic dimension in model-based clustering. Submitted to *Journal of Statistical Computation and Simulation*.

- Kim N.-H., Browne R.P. (Resubmitted with revision September 2021). Flexible mixture regression with the generalized hyperbolic distribution. Submitted to *Advances in Data Analysis and Classification*, under revision.

- Kim N.-H., Browne R.P. (submitted August 2021). Regularized cluster-preserving dimension reduction with the Stiefel elastic net discriminant variables. Submitted to *Computational Statistics and Data Analysis*.

Conference Articles
Published

1. Sucholutsky I., Kim N.-H., Browne R.P. and Schonlau M. (2021). One line to rule them all: Generating LO-shot soft-label prototypes. *2021 International Joint Conference on Neural Networks (IJCNN)*.

Presentations

1. Why would I need this again? *Statistics and Actuarial Science Student Seminar Series (SASSSS)*, Waterloo, Canada, July 2021.

2. Topics in component merging in model-based clustering. *2021 Annual Meeting of the Statistical Society of Canada (SSC 2021)*, Canada, June 2021.

3. Adapting the Motivated Strategies for Learning Questionnaire (MSLQ) to help students take control of their learning. *Society for Teaching and Learning in Higher Education (STLHE 2021)*, Canada, June 2021. Collaborated with Mugon J., Dong G., Jobidon E., Barichello M. and Prier A..

4. Finding a regularized common projection in model-based clustering (...or so I thought). *Statistics and Actuarial Science Student Seminar Series (SASSSS)*, Waterloo, Canada, March 2021.

5. Effect of penalisation on a mixture of factor analysers. *12th International Conference of the ERCIM WG on Computational and Methodological Statistics (CMStatistics 2019)*, London, UK, December 2019, *Invited*.

6. Subspace clustering for the finite mixture of generalized hyperbolic distributions. *International Workshop on Model-based Clustering and Classification (MBC^2)*, Catania, Italy, September 2018.

Other Projects

1. Skrzydlo D. and Kim N.-H. (2015). Using interactive activities and a case study to promote deeper learning in statistics. *Learning Innovation and Teaching Enhancement (LITE)*, University of Waterloo.

Referees

- Ryan P. Browne, Ph.D.
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  Dept. of Statistics and Actuarial Science, University of Waterloo.
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  Dept. of Statistics and Actuarial Science, University of Waterloo.
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