

## CURRICULUM VITAE

# BYOL KIM

3980 15th Avenue NE, Box 351617, Seattle, WA 98195  
(312) 315-9470 byolkim@uw.edu

## PROFESSIONAL POSITIONS

---

*Postdoctoral Scholar* Department of Biostatistics, University of Washington Sep 2021–(present)  
*UW Data Science Postdoctoral Fellow* eScience Institute, University of Washington Apr 2022–(present)

## EDUCATION

---

**The University of Chicago**, Chicago, IL Aug 2021  
Doctor of Philosophy in Statistics

- Thesis title: *Uncertainty Quantification under Weak Assumptions*
- Advisors: Rina Foygel Barber and Mladen Kolar

**The University of Chicago**, Chicago, IL Jun 2015  
Master of Science in Statistics

- Advisor: Lek-Heng Lim

**Yale University**, New Haven, CT May 2009  
Bachelor of Arts in Applied Mathematics, *cum laude*

**Inter-University Center for Japanese Language Studies**, Yokohama, Japan Jun 2008  
Completed the ten-month intensive program

## BIBLIOGRAPHY

---

### PUBLISHED

1. Ty O Easley, Zhen Ren, **Byol Kim**, Gregory Karczmar, Rina Foygel Barber, Federico Pineda. Enhancement-constrained acceleration: A robust reconstruction framework in breast DCE-MRI. *PLOS ONE*, 16(10): 1–21, OCT 2021. URL <https://doi.org/10.1371/journal.pone.0258621>
2. **Byol Kim**, Song Liu, and Mladen Kolar. Two-sample inference for high-dimensional Markov networks. *Journal of the Royal Statistical Society: Series B*, 83(5): 939–962, 2021. URL <https://rss.onlinelibrary.wiley.com/doi/abs/10.1111/rssb.12446>
3. **Byol Kim**, Chen Xu, and Rina Foygel Barber. Predictive inference is free with the jackknife+-after-bootstrap. In H. Larochelle, M. Ranzato, R. Hadsell, M. F. Balcan, and H. Lin, editors, *Advances in Neural Information Processing Systems 33*, 2020. URL <https://papers.nips.cc/paper/2020/file/2b346a0aa375a07f5a90a344a61416c4-Paper.pdf>

### UNDER REVIEW

4. **Byol Kim** and Rina Foygel Barber. Black box tests for algorithmic stability. [arXiv:2111.15546](https://arxiv.org/abs/2111.15546) [cs.LG] URL <http://arxiv.org/abs/2111.15546> Submitted to *Information and Inference: A Journal of the IMA*, 2021.

### IN PREPARATION

5. Irina Gaynanova, **Byol Kim**, and Mladen Kolar. Direct inference for Gaussian differential networks. Authors listed alphabetically.

## SOFTWARE

---

KLIEPInference.jl <https://github.com/mlakolar/KLIEPInference.jl>  
Enhanced-constrained acceleration [https://github.com/tyo8/ECA\\_Demo](https://github.com/tyo8/ECA_Demo)

## CONFERENCES AND SYMPOSIUMS

---

### INVITED SEMINARS

Black box tests for algorithmic stability  
*University of Washington Statistics Seminar* Seattle, WA Apr 2022  
*University of Bristol Statistics Seminar* online Apr 2022  
Jackknife+-after-bootstrap  
*International Seminar on Selective Inference* online Oct 2021

### INVITED ORAL PRESENTATIONS

Two-sample inference for high-dimensional Markov networks  
*The 33rd New England Statistics Symposium* Hartford, CT May 2019

### CONTRIBUTED POSTER PRESENTATIONS

Predictive inference is free with the jackknife+-after-bootstrap  
*Thirty-fourth Conference on Neural Information Processing Systems* online Dec 2020  
*Institute for Foundations of Data Science Kickoff* online Sep 2020

Direct inference for Gaussian differential networks  
*The 4th Workshop on Higher-Order Asymptotics & Post-Selection Inference* St. Louis, MO Aug 2019

Two-sample inference for high-dimensional Markov networks  
*The 3rd Workshop on Higher-Order Asymptotics & Post-Selection Inference* St. Louis, MO Sep 2018  
*The 2nd Midwest Machine Learning Symposium* Chicago, IL Jun 2018  
*New Aspects of Statistics, Financial Econometrics & Data Science* Chicago, IL May 2018

MRI reconstruction  
*International Society for Magnetic Resonance in Medicine 27th Annual Meeting & Exhibition* Montréal, QC May 2019  
*American Association of Physicists in Medicine 60th Annual Meeting & Exhibition* Nashville, TN Jul 2018

## PROFESSIONAL SERVICE

---

### MANUSCRIPT REVIEW

*Journal of the American Statistical Association* 2022  
*The 10th International Conference on Learning Representations* 2022  
*NeurIPS 2021 Workshop on Distribution Shifts: Connecting Methods and Applications* 2021  
*The 37th Conference on Uncertainty in Artificial Intelligence* 2021  
*The 24th International Conference on Artificial Intelligence and Statistics* 2021  
*The 9th International Conference on Learning Representation* 2021  
*The 34th Conference on Neural Information Processing Systems* 2020  
*The 37th International Conference on Machine Learning* 2020  
*The 23rd International Conference on Artificial Intelligence and Statistics* 2020  
*The 33rd Conference on Neural Information Processing Systems* 2019

## TEACHING

---

### The University of Chicago, Chicago, IL

Instructor	Statistical Models and Methods I	Jan–Mar 2019
Course Assistant	STAT 24410/30030 Statistical Theory and Method 1	Sep–Dec 2019
	STAT 20000 Elementary Statistics	Mar–Jun 2019
	STAT 24620/32950 Multivariate Statistical Analysis	Mar–Jun 2018
	STAT 22600 Analysis of Categorical Data	Jan–Mar 2018
	STAT 34700 Generalized Linear Models	Mar–Jun 2017
	STAT 34300 Applied Linear Statistical Methods	Sep–Dec 2016
	STAT 20000 Elementary Statistics	Mar–Jun 2016
	STAT 24400 Statistical Theory and Method 1	Jan–Mar 2016
Statistics Tutor	College Core Tutor Program	Oct 2014–Mar 2015

## MENTORING

---

### The University of Chicago, Chicago, IL

Co-advisor Student Inquiry & Research, Illinois Mathematics & Science Academy Oct 2014–Jun 2015

## HONORS, AWARDS, SCHOLARSHIPS

---

The University of Chicago Statistics departmental tuition scholarship	\$16,566	Jul 2014
The Richard U. Light Fellowship at Yale	\$32,640	Mar 2007
Bessemer Educational Scholarship	≈ \$200,000	Jul 2004

## SKILLS

---

Programming Languages	Julia, Python, R, MATLAB English (fluent), Korean (native), Japanese (fluent)
-----------------------	--