# Nicholas Aaron Syring

## **Contact Information**

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https://github.com/nasyring

#### Current Position

Washington University St. Louis, Postdoctoral Lecturer in Statistics, 2018–2020

#### Education

Ph.D. Mathematics, University of Illinois at Chicago, Advisor: Dr. Ryan Martin, 12/2017

M.S. Statistics, Northern Illinois University, 2013

B.S. Actuarial Science, Illinois State University, 2009

### **Journal Articles**

### Published or Accepted

N. Syring and R. Martin. Robust and Rate-Optimal Gibbs Posterior Inference on the Boundary of a Noisy Image. **Annals of Statistics.** (2019). Accepted. https://arxiv.org/abs/1606.08400v3. https://www.imstat.org/journals-and-publications/annals-of-statistics/annals-of-statistics-future-papers/.

R. Martin and N. Syring. Validity-preservation properties of rules for combining inferential models. Proceedings of the Eleventh International Symposium on Imprecise Probabilities: Theories and Applications, in **Proceedings of Machine Learning Research**. (2019), 103:286-294. http://proceedings.mlr.press/v103/martin19a/martin19a.pdf.

N. Syring and R. Martin. Calibrating General Posterior Credible Regions. **Biometrika.** (2018). https://doi.org/10.1093/biomet/asy054.

N. Syring L. Hong, and R. Martin. Gibbs Posterior Inference on Value-at-Risk. **Scandinavian Actuarial Journal.** (2019). https://doi.org/10.1080/03461238.2019.1573754.

N. Syring and R. Martin. Gibbs Posterior Inference on the Minimum Clinically Important Difference. **Journal of Statistical Planning and Inference.** 187 (2017): 67-77. http://dx.doi.org/10.1016/j.jspi.2017.03.001.

C. Liu, R. Martin, and N. Syring. Efficient Simulation from a Gamma Distribution with Small Shape Parameter. **Computational Statistics** 32, 4 (2017): 1767-1775. https://doi.org/10.1007/s00180-016-0692-0.

N. Syring and M. Li. BayesBD: An R Package for Bayesian Inference on Image Boundaries. **R Journal.** 9, 2 (2017): 149-162. https://journal.r-project.org/archive/2017/RJ-2017-052/index.html.

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#### In Preparation or Submitted

N. Syring. Gibbs Posterior Inference on Youden's Index cutoff. Submitted.

N. Syring and R. Martin. Gibbs posterior distributions: asymptotic concentration rates and applications. In preparation.

R. Skowron¹ and N. Syring. Pseudo-posterior Approaches to Index-matching Portfolio Construction. In preparation.

# **Teaching**

@ Washington University St. Louis

MATH3200: Elementary to Intermediate Statistics, Instructor (5 sections)

MATH<sub>475</sub>: Statistical Computation, Instructor

@ North Carolina State University

ST311: Introduction to Statistics, Instructor

ST371: Introduction to Probability and Distribution Theory, TA

@ University of Illinois at Chicago

STAT381: Applied Statistical Methods I, Instructor

MATH165: Business Calculus, TA MATH121: Precalculus, TA (2 times) MATH180: Calculus I, TA (2 times)

@ Northern Illinois University

STAT350: Introduction to Probability & Statistics, grader (4 times)

STAT<sub>3</sub>82: Theory of Interest, Financial Derivatives, & Statistics, TA (2 times)

STAT481: Probabilistic Foundations in Actuarial Science, TA (2 times)

# Advising

@ Washington University St. Louis

MATH500: Independent Work, Summer 2019

# Other Professional Experience

Allstate Insurance, *Data Scientist*, 12/2017 – 08/2018

Allstate Insurance, Data Scientist Intern, Summer 2017

Google Summer of Code, Summer 2016

NASA Langley Area Research Center, Visiting Research Scientist, Summer 2014

Capital One, Statistician Intern, Summer 2013

State Farm Life Insurance Company, Actuarial Analyst, 2009–2011

<sup>&</sup>lt;sup>1</sup>Graduate student at WUSTL.

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### Conferences and Seminar Talks

WHOA-PSI 4 Poster Presentation Treatment Selection Problems WUSTL-08/2019

ISIPTA 2019 Contributed Talk

*Validity-preservation properties of rules for combining inferential models* Uni Ghent–07/2019

Bayesian, Fiducial, and Frequentists (BFF 6) Poster Presentation

Gibbs Posterior Inference on Youden's Index cutoff

Duke-05/2019

**Statistics Seminar** 

Inferential models in errors-in-variables models

WUSTL-11/2018

Joint Statistical Meetings Invited Poster Presentation

Inferential Models for Instrumental Variables

Baltimore-07/2017

Summer Research Conference

Image Boundary Detection via a Gibbs Model

IIT-05/2016

Undergraduate Mathematics Seminar

Misspecified Statistical Models: What happens when the model is wrong?

Wheaton College-11/2015

Statistics Seminar

Scaling the Gibbs posterior

University of Illinois at Chicago-09/2015

Statistics Seminar

On Bayesian inference without a model

University of Illinois at Chicago-11/2014

#### Professional Service

Committee Member, Statistics Graduate Student Leadership Committee, University of Illinois at Chicago, 2014-2016.

Organizer, Graduate Statistics Seminar, University of Illinois at Chicago, 2014-2016.

Reviewer for: Journal of the Royal Statistical Society, Statistica Sinica.