

Thien Minh LE, Ph.D.

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Academic positions and Education

- **Harvard University, Massachusetts, USA**
Postdoc Fellow at Department of Biostatistics, 2020 – present
 Research Topic: “Network Science”
 Advisor: Dr. Jukka Pekka Onnela

- **Michigan State University, Michigan, USA**
*Ph.D. in Statistics, 2014 – 2020, **graduation date:** May 1 – 2020*
 Dissertation Topic: “Estimation and Statistical Inference for Network Structures”
 Advisor: Dr. Ping-Shou Zhong
 Committee members: Dr. Hira Koul, Dr. Lyudmila Sakhanenko, and Dr. Qing Lu

- **Ho Chi Minh City University of Science, Vietnam**
*M.S. in Probability, 2009 – 2011, **graduation date:** November 30 – 2011*
 Dissertation Topic: “Urbanik Convolution and Generalized Independent Increments Processes”
 Advisor: Dr. Nguyen Van Thu

- **Quy Nhon University, Vietnam**
*B.S. in Mathematics Pedagogy, 2004 – 2008, **graduation date:** June 30 – 2008*

Research Interests

High-Dimensional Statistical Inference, Network Sciences, Approximate Bayesian Computation, Statistics with Applications in Healthcare, Finance, and Agriculture.

Publications

1. 2020+ Thien M. Le and Ping-Shou Zhong *Goodness-of-fit Tests for Network Structures*. Preprint.
2. 2020+ Thien M. Le and Ping-Shou Zhong *Estimation of Precision Matrix with Known Graphical Structure*. Preprint.
3. 2020+ F. Claire Hankenson, Joshua Kim, Thien M. Le, Frank Lawrence, and Jacquelyn M. DeValle *Guidance on Skin Preparation Methods and Thermal Support for Surgery in Laboratory Mice and Rats*. In Revision.
4. 2020+ Hyokyung G. Hong, Wodan Ling, Thien M. Le, Hong Su An, Kathleen Oberst, and Ann M Annis *Quantile regression exploration of heterogeneous associations between sociodemographics, multimorbidities, and functional limitations among older adults, NHANES, 2007-2016*. In Revision.

Research Experience**Harvard University, Massachusetts, USA**

- 06/2020 – present : **Postdoc Fellow** at Department of Biostatistics
 - Develops new methods in the intersection between Approximate Bayesian Computation and Network Sciences

Michigan State University, Michigan, USA

- 08/2019 – 05/2020 : **Statistical Consultant** at Center for Statistical Training and Consulting
 - Consult clients across the campus for using statistical methodologies and statistical software in their research. Clients include graduate students, postdoctoral researchers, and faculties.
- 06/2018 – 07/2019 : **Research Assistant** at Department of Statistics and Probability
Project: Extreme Value Theory for Spatially Indexed Functional Data, NSF Grant DMS-1462156
 - Developed a new test statistic for testing goodness-of-fit of a pre-specified network structure under high-dimensional settings
 - Developed a new selection tuning procedure for estimating network structures
 - Established theoretical results for the proposed test statistic
 - Used high performance computer to investigate applications of the proposed test statistics
- 06/2017 – 08/2017 : **Research Assistant** at Department of Statistics and Probability
Project: Extreme Value Theory for Spatially Indexed Functional Data, NSF Grant DMS-1462156
 - Developed a new estimator for the precision matrix when its graphical structure known under high-dimensional settings
 - Established theoretical results for the proposed estimator
- 01/2017 – 05/2017 : **Research Assistant** at Department of Statistics and Probability
Project: Reconstruct Lake Chad Hydrology
 - Investigated Gibbs sampling approach to the hierarchical hydrology model.
 - Developed R code for the model

Teaching Experience

Michigan State University, Michigan, USA

- 01/2017 – 5/2018: **Teaching Assistant**, Role : Grader
STT 442, Theory of Probability and Statistics II, Statistics
STT 843, Multivariate Analysis
STT 888, Stochastic Models in Finance
- 09/2017 – 12/2018: **Teaching Assistant**, Role : Lab Instructor
STT 201, Statistical Methods
- 9/2016 – 12/2016 : **Teaching Assistant**, Role : Lab Instructor
STT 201, Statistical Methods
- 08/2014 – 8/2016 : **Teaching Assistant**, Role : Grader
STT 315, Introduction to Probability and Statistics for Business
STT 351, Probability and Statistics for Engineering

Ho Chi Minh City University of Natural Resources and Environment, Vietnam

- 09/2009 – 07/2014 : **Lecturer** of Statistics and Mathematics, Role: Instructor
Introduction to Probability and Statistics for Business
Probability and Statistics for Engineering
One Variable Calculus
Multivariate Calculus
Linear Algebra

Sai Gon National Studies High School, Ho Chi Minh City, Vietnam

- 08/2008 – 08/2009: **Teacher** of Mathematics, Role: Instructor
Calculus
Algebra
Geometry
Trigonometry

Talks and Conference Activity

- *A Simple Approach for the Testing Problem in Sequencing Data*, Center for Statistical Training and Consulting, Michigan State University, December 2019.

Books, Chapters, and Training Materials

- *Data Visualization* and *Initial Data Analysis* workshops (2 out of 5 workshop series) for the R-certificate offered by Center for Statistical Training and Consulting of Michigan State University, January 2020. (Joint work with Dr. Marianne Huebner)

Computer Skills

- **Computer Programming:** R, Python, MATLAB, SAS, SPSS, STATA, Minitab
- **Editing and Productivity:** L^AT_EX, Microsoft Office
- **Operating Systems:** Microsoft Windows, Linux

Selected Statistics Courses Work

- **Statistical Methods I STT 863 , Statistical Methods II STT 864**
These courses covered linear models, generalized linear models, generalized linear mixed models.
- **Linear Models Methodology STT 867 , Mixed Models STT 868**
Materials in these courses are quite similar to STT 863, 864 but more theoretical and heavy in proofs.
- **Statistical Inference I STT 872 , Statistical Inference II STT 951**
These courses studied classical mathematical statistics concepts such as maximum likelihood estimator, testing statistical hypotheses.
- **Design of Experiment STT 801 , Statistical Learning and Data Mining STT 873 , Applied Machine Learning CMSE 890 , Introduction to Bayesian Analysis STT 874 , Multivariate Analysis STT 843 , Time Series Analysis STT 844**
- **Analysis of Survival Data STT 847** (Audit)

Honours/Awards/Grants

- “Outstanding Student” Scholarship of Quynhon University, years 2005-2008
- Second Prize of Analysis, the 15th Olympiad Examination of Mathematics for National Wide Students, 2007
- “Support to School” Scholarship of Mathematics Department at Quynhon University, years 2005- 2007
- Third Prize of Analysis, the 14th Olympiad Examination of Mathematics for National Wide Students, 2006
- Excellent Student Certificate of Quy Nhon University, 2006
- “Support to School” Scholarship of Tuoi tre (Youth) Newspaper, 2004
- Coming First in the Entrance Examination into Quy Nhon University, 2004
- Coming First in the Entrance Examination into Phu Yen University, 2004

- Coming Third in the Entrance Examination into MienTrung University of Civil Engineering, 2004

Professional Memberships

- American Statistical Association
- International Chinese Statistical Association

Leadership and Services

- 09/2016 – 09/2017: **President** of Association Vietnamese Scholars and Students at Michigan State University, Michigan, USA
- 08/2008 – 08/2014: **Coach** of Vovinam Vietnamese Martial Arts, Tan Binh District's Children House Vovinam Club, Ho Chi Minh City, Vietnam
- 06/2007 – 06/2008: **Assistant Coach** of Vovinam Vietnamese Martial Arts, Quang Trung Vovinam Club, Quy Nhon City, Binh Dinh Province, Vietnam
- 09/2004 – 06/008: **Academic President** of 27th Intake- Mathematics Pedagogy Class (Class Size: 60), Quy Nhon University, Vietnam
- 09/2004 – 06/2008: **Head** of Free Tutoring Group for Laotian and Vietnamese Ethnic Minority Students of 27th Intake- Mathematics Pedagogy(Group size: 8), Quy Nhon University, Vietnam
- 02/2008 – 04/2008: **Vice President** of Teaching Intern Group (Group Size: 40) at Nguyen Hue High School, Tuy Hoa City, Phu Yen Province, Vietnam

References

Dr. Ping-Shou Zhong

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