Tetsuya Hara*

Pennsylvania State University
Department of Statistics
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Education

Pennsylvania State University, University Park, Ph.D., Statistics, expected May 2019,

Advisor: Bing Li, GPA: 3.96/4.00

Hitotsubashi University, Kunitachi, B.A., Economics, 2014, Advisors: Naoyuki Ishimura, Kenta Kobayashi, GPA: 3.94/4.00

University of California, Berkeley, Exchange, Mathematics, 2013

GPA: 3.814/4.00

Work & Service Experience

Intern, Research & Development, Ford Global Data Insights & Analytics, Summer 2018 Clustered car nameplates using hierarchical clustering and Poincaré embedding.

Intern, Nomura Research Institute, Summer 2013

Analyzed interface & data storage optimization for portable device used by insurance sales person.

Consultant, Statistical Consulting Center, Pennsylvania State University, 2015 Provided statistical consulting for graduate students from other departments.

ASA Datafest Volunteer, Department of Statistics, Pennsylvania State University, 2017

Dorm Management Volunteer, International Students Dormitory Association of Kodaira, 2012

Awards, Scholarships & Certification

Best Poster Award, Penn State Statistics 50th Anniversary Conference, May 2018

 ${\it Graduate\ Assistanship},\ {\it Department\ of\ Statistics},\ {\it Pennsylvania\ State\ University},\ 2014\ to\ present$

Graded Ph.D. level and taught Junior and Senior level courses.

Excellent Academic Achievement, Department of Economics, Hitotsubashi University, 2012

Japan Student Services Organization Scholarship, for exchange to UC Berkeley, 2013

Actuarial Exam P, 11/17/2011, ID: 82124 Actuarial Exam FM, 4/9/2012, ID: 66205

Research

Sufficient Dimension Reduction, Functional Data Analysis, Support Vector Machines, Neural Networks,

Graph Embedding, Poincaré Embedding, Reproducing Kernel Hilber Space

Practical Experiences

Semiparametric Copula Estimation, Quantile Regression, Non-stationary Time Series Analysis,

Discrete Cosine Transform Portfolio Construction, Linear & Quadratic Programming,

Numerical Calculation of Derivative Prices, Substitute Charge Method, Finite Element Method,

Reinforcement Learning, Gradient Boosting

Notable Coursework

Statistical Computing, High Dimensional Modelling & Applications, Nonparametric Methods

 $Stochastic\ Processes\ \&\ Monte\ Carlo\ Methods,\ Categorical\ Data,\ Regression\ Models,\ Theory\ of\ Statistics,$

Asymptotic Tools, Probability Theory, Linear Models, Design and Analysis of Experiments

Statistical Inference, Multivariate Analysis

Languages

python (used in internship and research)

julia, r (used in research)

c, c++, matlab (previously used in research)

LATEX, html, css, git, experience with UNIX (used daily)

sql (have some experience)

Japanese > English > Chinese > French > Spanish

^{*}Dual citizenship. Tetsuya Hara is on Japanese documents. Zheye Yuan is on American documents.