

Yongkai Qiu

PERSONAL INFORMATION

UMID: 26441877
BIRTHDAY: April 25th, 1995
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EDUCATION

SEPTEMBER 2018 to MAY 2020 **the University of Michigan**, Ann Arbor, Michigan
College of Literature, Science and the Arts, Dual Master degree
Master of ACTUARIAL MATHEMATICS, Master of APPLIED STATISTICS
Michigan Institute for Data Science, GRADUATE DATA SCIENCE CERTIFICATE
Center of Research on Learning and Teaching, GRADUATE TEACHER CERTIFICATE
Member of STUDENT ACTUARIES AT MICHIGAN (SAM)
CUMULATIVE GPA: 3.77/4.0

SEPTEMBER 2014 to JULY 2018 **Central University of Finance and Economics**, Beijing, China
School of Statistics and Mathematics, Bachelor of Science in STATISTICS
Thesis: "Regression and Cluster analysis on World Happiness Index"
Advisor: PROF. YUEHAN YANG | Grade: Excellent (4.0/4.0)
CUMULATIVE GPA: 3.3/4.0

ACTUARIAL EXAMS

PASSING EXAMS *EXAM P* May 2017 *EXAM FM* August 2017 *EXAM STAM* February 2019 *EXAM SRM* passed by VEE
VEE CREDITS *Economics* *Applied Statistics* *Corporate Finance*

ACADEMIC COMMITMENT, HONORS AND SCHOLARSHIPS

Academic Positions at UM	Graduate Student Instructor for MATH 147 <i>Interest Theory</i> Independent lecturer of MATH 147 for the academic year 2019-2020. Instructing topics including simple & compound interest, annuities, bonds, and fundamental business knowledge(NPV, IRR, etc.) and life insurance. Graduate Student Research Assistant under PROF. IVO DINOVI R package, application, and visualization method development. Leading a group of 5 students.
Scholarships	Cortright, L.C. Memorial scholarship Frank H. Davis and Agnes Adele Wood Memorial Fellowship in Actuarial Science

WORK AND RESEARCH EXPERIENCE

JANUARY 2019 to PRESENT	Research Assistant at THE UNIVERSITY OF MICHIGAN, Ann Arbor, MI <i>SOCR Big Data and Predictive Analytics and IHPI Health Service Research (IHPI-HSR)</i> Time Complexity and Inferential Uncertainty Project Advisor: PROF. IVO DINOVI Websites: TCIU page Yongkai Page Honor: IHPI Summer Fellowship award ◊ Performed data manipulation, Reformated 4D long format data into 3D array data. Applied SHINY package on 2D and 3D data visualization. Created interactive time series plots. ◊ Created the ARIMAX time series analysis model, overall increases 10% of prediction accuracy. ◊ Performed PCA and LASSO feature selection on important economics influencing factor. ◊ Independently created an R package TSplotly which provides interactive methods of visualizing time series analysis result and data transformation method between GGLOT2 and PLOTLY packages. ◊ Now focusing on documenting and developing R package TCIU, supporting the publication of the textbook <i>Data Science: Time Complexity and Inferential Uncertainty</i> which focuses on Spacetime analysis.
JULY 2019 to PRESENT	Assistant for Provost's council of THE UNIVERSITY OF MICHIGAN, Ann Arbor, MI Supervisor: MARY BOYCE The Office of Diversity, Equity and Inclusion. ◊ Analyzed sensitive data about Honor students' academic performance and GPA trend in U of M ◊ Supervised potential grade inflation among different campus. Built shiny application on data visualization. Written interactive visualization reports supporting the decision making of the Provost's council.
JUNE 2019 to AUGUST 2019	Teaching Assistant at U OF M INSTITUTE FOR SOCIAL RESEARCH, Ann Arbor, MI <i>Inter-university Consortium for Political and Social Research (ICPSR) Summer Program</i> Supervisor: PROF. BRIAN POLLINS Course: Regression Analysis II: Linear Model ◊ Planned course materials. Grading both handwriting and coding assignments and hosting office hours. ◊ Assisted students on R coding, building regression analysis models, estimating coefficients, and calculating related statistics(R^2 , σ_e , etc.) both by matrix manipulation and R package.

COMPUTER SKILLS

Intermediate Knowledge: PYTHON, Matlab, SPSS, Access, PowerPoint
Proficient Knowledge: R language, Excel, L^AT_EX