

Haipeng GAO

CONTACT INFORMATION

EMAIL: gaoh@live.unc.edu
ADDRESS: Hanes Hall B4, Chapel Hill, NC, 27599
WEBSITE: hg90.github.io

INDUSTRY EXPERIENCE

Aug 2018	Summer Intern at PayPal San Jose, CA
May 2018-	<i>Global Risk & Data Science, Merchant Risk Modeling team</i> Developed non-homogeneous hidden Markov models to forecast merchants' activities using Stan. Implemented adaptive machine learning models and Super Learners for merchant risk detection at both transaction and account levels using Hadoop, h2o.
Aug 2017	Summer Intern at UNC Management Company Chapel Hill, NC
May 2017-	<i>Investment Strategy & Risk Management</i> Developed and maintained non-homogeneous hidden Markov models to support team's directional strategy on stock market indices. Developed change-point detection to support team's momentum strategies on indices, using R and Python.

EDUCATION

	University of North Carolina at Chapel Hill Chapel Hill, NC
MAY 2019	PhD in Interdisciplinary STATISTICS and OPERATIONS RESEARCH Dissertation: "Bayesian Inference on Stochastic Cusp Catastrophe Models" Under supervision of Prof. CHUANSHU JI
	Courant Institute of Mathematical Sciences, NYU New York, NY
MAY 2015	MS in MATHEMATICS
	University of North Carolina at Chapel Hill Chapel Hill, NC
DEC 2012	BS Highest Distinction in APPLIED MATHEMATICS, minor in MATHEMATICAL DECISION SCIENCE

SKILLS

STATISTICS:	Python (with Stan, h2o, TensorFlow, Scikit-learn), R, Matlab
PROGRAMMING:	Python, JAVA, C/C++ CLUSTER-COMPUTING: Hadoop, Spark
MODELING:	hidden Markov models, stochastic differential equations, random forests, ensemble learning, SVMs, multivariate analysis

TEACHING EXPERIENCE

current	Instructor at University of North Carolina Chapel Hill, NC
Jan 2017-	<i>Department of Statistics and Operations Research</i> Taught <i>Introduction to Data Models and Inference</i> (STOR 155) in Fall 2018, Spring 2018 and Fall 2017, Spring 2017, class size of 50 students

INTERESTS AND ACTIVITIES

Participated in NYU Intramural Basketball in Spring 2014
Personal investment on US equity