

# Haipeng GAO

## CONTACT INFORMATION

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WEBSITE: [hg90.github.io](http://hg90.github.io)  
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SCHOOL: Hanes Hall B4, Chapel Hill, NC, 27599

## INDUSTRY EXPERIENCE

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Aug 2018	Summer Intern at <b>PayPal</b>   San Jose, CA
May 2018-	<i>Global Risk &amp; Data Science, Merchant Risk Modeling team</i> Developed non-homogeneous hidden Markov models to forecast merchants' activities. Implemented adaptive machine learning models and Super Learners for merchant risk detection at both transaction and account levels using Python, Hadoop, h2o.
Aug 2017	Summer Intern at <b>UNC Management Company</b>   Chapel Hill, NC
May 2017-	<i>Investment Strategy &amp; 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

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	<b>University of North Carolina at Chapel Hill</b>   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
	<b>Courant Institute of Mathematical Sciences, NYU</b>   New York, NY
MAY 2015	MS in MATHEMATICS
	<b>University of North Carolina at Chapel Hill</b>   Chapel Hill, NC
DEC 2012	BS Highest Distinction in APPLIED MATHEMATICS, minor in MATHEMATICAL DECISION SCIENCE

## TEACHING EXPERIENCE

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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 Spring 2017, Fall 2017, Spring 2018 and Fall 2018, class size of 50 students

## COMPUTER SKILLS

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Data Science: Python (with Scikit-learn, tensorflow, h2o), Hadoop, Spark, Matlab  
Programming: Python, JAVA, C/C++, Git/GitHub

## INTERESTS AND ACTIVITIES

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