

Su Chen, Ph.D., Associate Professor of Instruction

CONTACT INFORMATION	Department of Statistics and Data Science University of Texas at Austin s.chen@utexas.edu https://suchen1221.github.io	
ACADEMIC APPOINTMENTS	The University of Texas at Austin Department of Statistics and Data Science Associate Professor of Instruction	2024 - present
	William Marsh Rice University Center for Transforming Data to Knowledge Assistant Teaching Professor	2020 - 2024
	Texas A&M University Department of Statistics Lecturer	2019 - 2020
	The University of Texas at Austin Department of Statistics and Data Science Assistant Instructor	2018 - 2019
EDUCATION	The University of Texas at Austin Ph.D., Statistics • Thesis Topic: <i>Bayesian Variable Selection and Hypothesis Testing</i> • Advisors: Stephen G. Walker, Ph.D. M.S., Mathematics,	2015-2020 2012
	Zhejinag University , Hangzhou, China B.S., Mathematic,	2008
PROFESSIONAL CERTIFICATION AND MEMBERSHIP	Software and Data Carpentry Certified Instructor The International Society of Bayesian Analysis The American Statistical Association Associate of the Society of Actuaries	Since 2021 Since 2016 Since 2015 Since 2013
TEACHING EXPERIENCE	Courses Developed at Rice University • DSCI 101 Introduction to Data Sciences	

- This is an introductory level experiential learning course where students learn about knowledge and techniques in data science by completing semester-long data analysis projects in teams.
- Course content includes question formulation in data science, data wrangling techniques and tools; exploratory data analysis and data visualization; applied statistical inference; machine learning; model interpretation and communication.
- This course teaches fundamentals of Python programming and is part of core curriculum for the Data Science Minor degree.
- COMP 680 Statistics for Computing & Data Science
 - This is a master level course where students learn the fundamentals of probability and statistical inference with a focus on simulation based inference and its applications in real-world contexts.
 - Course content includes probability theory, maximum likelihood estimate, parametric and non-parametric inference with bootstrap, hypothesis testing, stochastic processes, Bayesian inference, and regression-based modeling.
 - This is one of the six core courses of the curriculum for the Professional Master degree of Data Science.

Courses Taught at Rice University

- DSCI 101 Introduction to Data Sciences
Fall 2020, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023
- COMP 680 Statistics for Computing & Data Science
Fall 2021, Fall 2022
- DSCI 435/535 Data Science Capstone Projects
Fall 2020, Spring 2021, Spring 2022, Spring 2023
- DSCI 415/515 Data Science Consulting
Fall 2020, Spring 2021

Courses Taught at Texas A&M

- STAT 335 Principles of Data Science Summer 2019, Fall 2019

Courses Taught at UT-Austin

- SDS 323 Introduction to Statistical Learning Fall 2018, Spring 2019
- SDS 302 Data Analysis for the Health Sciences Spring 2018

Short courses and Workshops

- [Software Carpentry Programming with R workshop](#), South Big Data Hubs DataUp Program by University of Houston-Victoria & Houston Community College 2022

	• Generalized Linear Models short course, STaRT@Rice 2021, 2022 • Datathon for Beginners workshop, Texas A&M University 2019																		
PUBLICATIONS AND CONFERENCE TALKS	• Gong, H., Chen, S. (2023) Estimating Positional Plus-Minus in the NBA, <i>MIT Sloan Sports Analytics Conference Research Paper Finalist</i> • Barman, A., Chen, S., et al, (2022) Experiential Learning in Data Science Through a Novel Client-facing Consulting Course. <i>IEEE Frontiers in Education</i> • Mentzelopoulos, S., Chen, S., et al, (2022) Derivation and Performance of an End-of-Life Practice Score Aimed at Interpreting Worldwide Treatment-limiting Decisions in the Critically Ill. <i>Critical Care</i> 26(1), 1-14. • Chen, S. and Walker, S.G. (2021). A New Statistic for Bayesian Hypothesis Testing. <i>Econometrics and Statistics</i> 26, 139-152. • Chen, S. and Walker, S.G. (2019). Fast Bayesian variable selection for high dimensional linear models: Marginal solo spike and slab priors. <i>Electronic Journal of Statistics</i> 13, 284-309. • Bayesian Variable Selection and FDR Control. Contributed poster session, JSM, 2019 • Bayes in High Dimension: Fast Bayesian Variable Selection. Contributed session, ISBA, 2018																		
HONORS AND GRANT AWARDS	<table> <tr> <td>Fondren Fellowship Research Mentor, Rice University</td><td>2022 - 2023</td></tr> <tr> <td>BRIDGE Seed Grants, Co-PI, Rice University</td><td>2020 - 2023</td></tr> <tr> <td>Brown Teaching Grants, PI, Rice University</td><td>2020 - 2022</td></tr> <tr> <td>Graduate Continuing Fellowship, UT-Austin</td><td>2019 - 2020</td></tr> <tr> <td>NSF Junior Travel Support, ISBA World Meeting</td><td>2018</td></tr> <tr> <td>Graduate Fellowship, UT-Austin</td><td>2018</td></tr> <tr> <td>Professional Development Award, UT-Austin</td><td>2018</td></tr> <tr> <td>Frank Gerth III Teaching Excellence Award, UT-Austin</td><td>2010</td></tr> <tr> <td>Graduate Fellowship, UT-Austin</td><td>2008 - 2009</td></tr> </table>	Fondren Fellowship Research Mentor, Rice University	2022 - 2023	BRIDGE Seed Grants, Co-PI, Rice University	2020 - 2023	Brown Teaching Grants, PI, Rice University	2020 - 2022	Graduate Continuing Fellowship, UT-Austin	2019 - 2020	NSF Junior Travel Support, ISBA World Meeting	2018	Graduate Fellowship, UT-Austin	2018	Professional Development Award, UT-Austin	2018	Frank Gerth III Teaching Excellence Award, UT-Austin	2010	Graduate Fellowship, UT-Austin	2008 - 2009
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SKILLS	Computer Programming: R, Python, SQL, C, PHP, Excel (Macro, VBA), Access Language: Fluent in English, native speaker in Mandarin Chinese																		
EMPLOYMENT EXPERIENCE	HGB Actuarial Associate at Towers Watson May 2014 - Jul 2015 • Performed financial analyses including developing pricing and employee contributions strategies, modeling plan design alternatives and calculating reserves. Pension Actuarial Analyst at Towers Watson Jan 2013 - Apr 2014																		

- Performed calculation of minimum required and maximum deductible contributions under ERISA and accounting results under ASC 715 for qualified pension plans.
- Prepared and reviewed government filings including Form 5500 Schedules B and R, and PBGC Comprehensive Form.

Data Analyst Intern at PetRelocation.Com Oct 2012 - Dec 2012

- Developed machine learning algorithms for leads dispatching system to increase sales.

Actuarial Intern at Swiss Re May 2012 - Aug 2012

- Conducted several experience studies including IBNR Study, Claim Distribution Study, Claim Termination Study on Disability Income line

OTHER	Director of Data Science Minor, Rice University	2022-present
PROFESSIONAL	Divisional Advisor for Engineering, Rice University	2022-present
EXPERIENCE	SIGCSE TS 2022 (53rd ACM Technical Symposium on Computer Science Education) program committee and reviewer,	2021
AND SERVICE	Journal of the Royal Statistical Society Series B reviewer	2021
	Instructor for STaRT@Rice program, Rice University	2021-present
	Faculty search committee, Rice University	2021-present
	Master of Data Science admission committee, Rice University	2021-present
	Judge for Rice Undergraduate Research Symposium	2020-present
	Faculty advisor and judge for Rice Datathon Competition	2020-present
	Judge for HackRice Competition	2020-present
	Data Science Consulting Service, Rice University	2020-present
	Data Science Minor advisor, Rice University	2020-present
	Judge for Datathon, Texas A&M	2019
	Mentor of Direct Reading Program, UT-Austin	2018 - 2019
	Research Assistant of Project 2021, UT-Austin	2017 - 2018
	Teaching Assistant, UT-Austin	2008 - 2012