

# **Industry Day and Data Science Competition 2021**

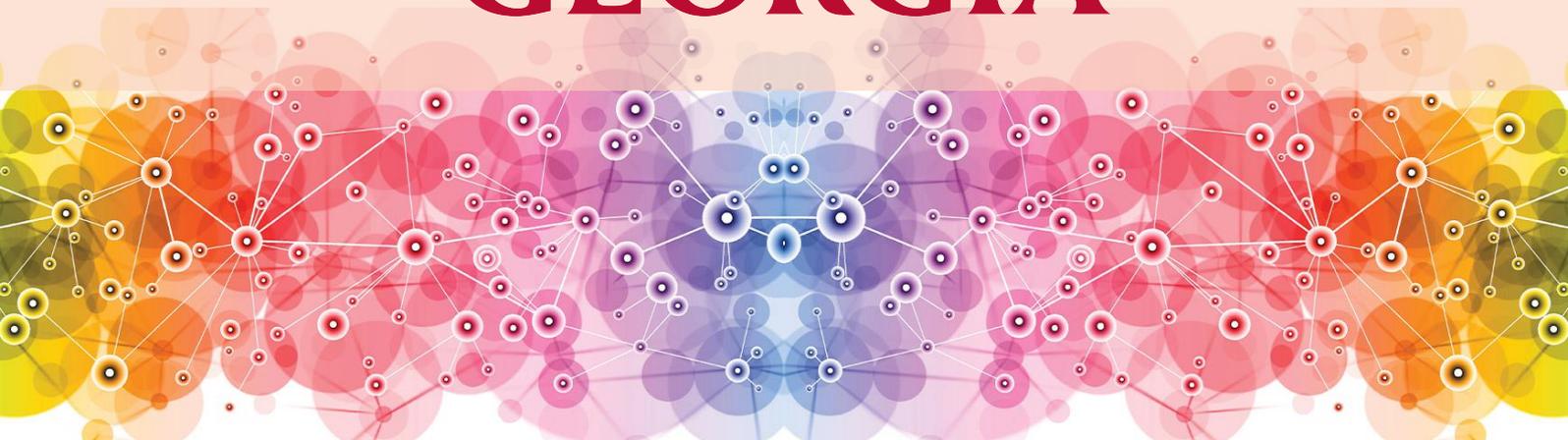
**April 28, 2021**

**Hosted by:**

**Department of Statistics**



**UNIVERSITY OF  
GEORGIA**



# Introduction

Please join us for the 2021 Industry Day to be held on April 28, 2021 from 4:00 pm to 7:00 pm. This virtual event is a celebration of the Inaugural Data Science Competition organized by the Department of Statistics at the University of Georgia, jointly with Data Scientists from Industry. It is sponsored by Dr. Mohamad Al Lawati Academic Enhancement Fund. There will also be a panel discussion on Careers in Data Science. The agenda includes:

- Remarks by UGA Provost Jack Hu and Franklin College Dean Alan Dorsey;
- Presentations by the top Undergraduate and Graduate teams in the Data Science Competition;
- Panel Discussion on Careers in Data Science in Industry by Executives from Chewy, Georgia Pacific, Home Depot, and Janssen/Johnson and Johnson; and
- Awards to winning teams and closing remarks by Dr. Mohamad Al Lawati.

The competition was conducted during March to April, and it attracted phenomenal response from UGA students. We had 96 students participating in 10 undergraduate teams and 16 graduate teams from 25 different programs across campus. Most teams had students from multiple disciplines, making the competition truly interdisciplinary!

Ag Econ	Applied Econ	Artificial Intelligence	Ag-Civil-Env-Mech Engineering
Bioinformatics	Biostatistics	Business Analytics	Computer Science
Data Science	Cognitive Science	Economics	Educational Psychology
Electrical Engg	Epidemiology and Biostatistics	Geography	Management Information Systems
Marine Science	Mathematics	Mechanical Engineering	Microbiology
Physics	Political Science and International Relations	Psychology	Risk Management
Statistics			

Please peruse the rest of the brochure to learn more about the competition and the Industry Day.

We hope you will attend the Industry Day to support the highly talented UGA students!

# The Competition

The Data Science Competition involved developing a quantitative model for making Credit Card Decisions by a financial institution. The teams were given simulated datasets that were typical of historical performance of credit card accounts together with credit history information. Each team had to develop two models, one using traditional statistical techniques and another using a modern machine learning algorithm. They had to compare the results from these two methods, select an appropriate one, and use it to develop an algorithm for making accept and decline decisions on credit card applications. The projects were judged based on the quality of the work, the written report, the code, and oral presentation. Each judging panel was composed of two members: one from UGA faculty and a Data Scientist from Industry.

# Appreciation

We are indebted to many individuals for their contributions to the Inaugural Competition and Industry Day:

- First and foremost, all the students who participated in the competition deserve huge credit for their initiative and excellent performance.
- Data Science Colleagues from a financial institution provided tremendous support in formulating the project, providing the simulated datasets, and also serving as judges.
- Six UGA faculty mentors mentored the undergraduate teams.
- Eight UGA faculty members served as judges.
- Thank you to all the Industry Executives for their participation in the Career Panel.
- Special thanks to Dr. Crystal Leach, UGA Director of Industry Collaborations, and members of the Office of Corporate and Foundation Relations for connecting us with company executives for the Career Panel.



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# UGA Data Science Competition 2021 Committees

## Organizers

T. N. Sriram, University of Georgia  
Abhyuday Mandal, University of Georgia

## Mentoring Committee

Xianyan Chen, Department of Statistics  
Monsur Chowdhury, Department of Statistics  
Dan Hall, Department of Statistics  
Jaewoo Lee, Department of Computer Science  
Abhyuday Mandal, Department of Statistics  
Jaxk Reeves, Department of Statistics

## Evaluation Committee

Shuyang (Ray) Bai, Department of Statistics  
Xianyan Chen, Department of Statistics  
Monsur Chowdhury, Department of Statistics  
Pengsheng Ji, Department of Statistics  
Yuan Ke, Department of Statistics  
Mohamad K Shirani Faradonbeh, Department of Statistics  
Justin Strait, Department of Statistics  
Qian Xiao, Department of Statistics

## Staff Support



Wendy Starnes, Department of Statistics

## Sponsors



## Organizers, Judges and Mentors

### Organizers

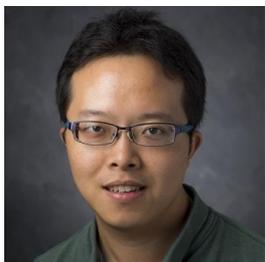


T.N. Sriram



Abhyuday Mandal

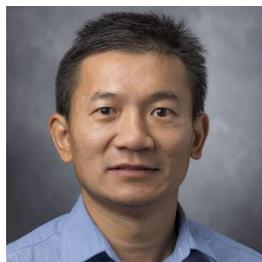
## Judges



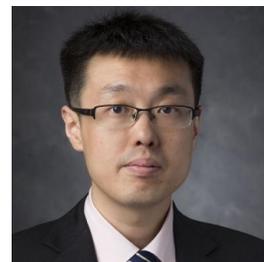
Ray (Shuyang) Bai



Monsur Chowdhury



Pengsheng Ji



Yuan Ke



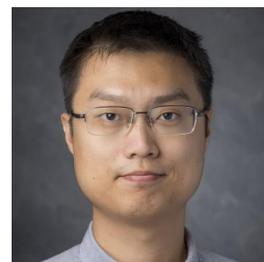
Xianyan Chen



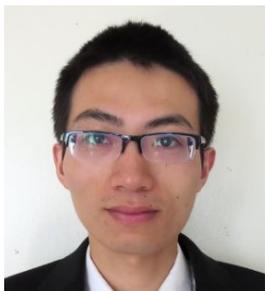
Justin Strait



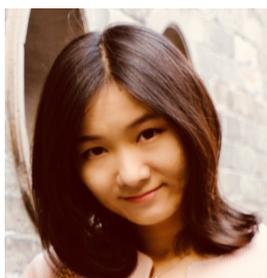
Mohamad Kazem  
Shirani Faradonbeh



Qian Xiao



Linwei Hu



Wenhao Pan



Rahul Singh



Joel Vaughan



Amy Wang



Hui Xian

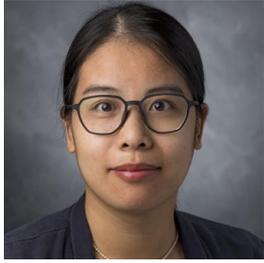


Shaojie (Kyle) Xu



Zhanyang Zhang

## Mentors



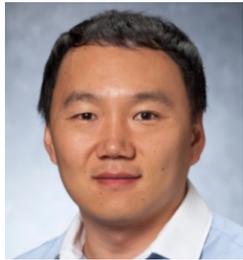
Xianyan Chen



Monsur Chowdhury



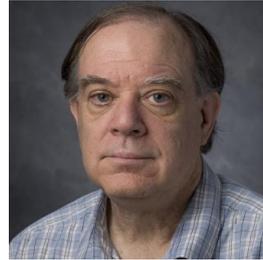
Dan Hall



Jaewoo Lee



Abhyuday Mandal



Jaxk Reeves

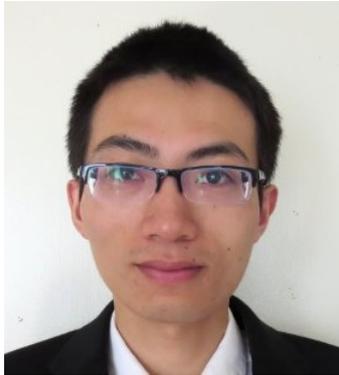


**Industry Partners**

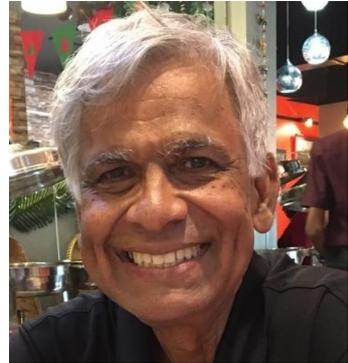
## Industry Partners



Soroush Aramideh



Linwei Hu



Vijay Nair



Wenhao Pan



Jinwen Qiu



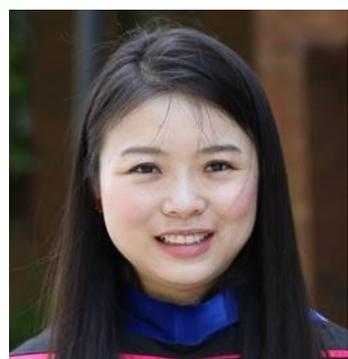
Rahul Singh



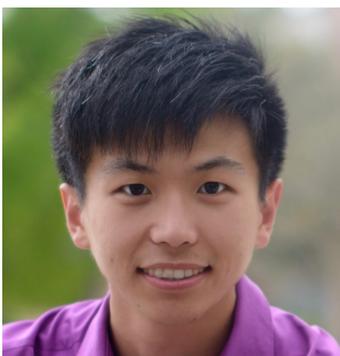
Joel Vaughan



Amy Wang



Hui Xian



Shaojie (Kyle) Xu



Zhanyang Zhang

A close-up photograph of a knitted fabric, primarily in shades of orange and white. The texture is intricate, showing the interlocking of stitches. A black hook, likely from a knitting machine, is visible in the upper right corner, partially obscured by the fabric. The lighting is soft, highlighting the fibers and the three-dimensional quality of the knit.

## Career Panel

## Career Panel



Sam Coyne  
Director of Artificial Intelligence  
Georgia-Pacific  
[Samuel.Coyne@gapac.com](mailto:Samuel.Coyne@gapac.com)



Amil Williamson  
Data Scientist  
Georgia-Pacific  
[amil.williamson@gapac.com](mailto:amil.williamson@gapac.com)



Susan Daniel  
Senior Microbiologist  
Janssen/Johnson and Johnson  
[sdaniel3@its.jnj.com](mailto:sdaniel3@its.jnj.com)



Mary Beth Desper  
Environmental Health & Safety Specialist  
Janssen/Johnson and Johnson  
[MDesper@its.jnj.com](mailto:MDesper@its.jnj.com)



Khalifeh Al Jadda  
Director of Online Core Data Science  
The Home Depot  
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James Pestrak  
Senior Data Scientist of Supply Chain  
Chewy  
[james.w.pesttrak@gmail.com](mailto:james.w.pesttrak@gmail.com)

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## Bio-sketches of Career Panelists

We are pleased to have 6 distinguished panelists.

### Khalifeh Al Jadda

Khalifeh is the Director of Data Science at The Home Depot. In this role, he manages the Core Data Science organization, which includes the Core Recommendation Data Science team, Core Search Data Science team, and Visual AI team. Prior to Home Depot, he worked in Data Science at Career Builder for over four years. Khalifeh earned his Bachelors and Masters in Computer Science from Jordan University of Science and Technology, and earned his PhD in Computer Science from the University of Georgia. He is the Founder and Manager of the Southern Data Science Conference (SDSC), and also the Co-Founder and VP of ATLytiCS Inc, a non-profit organization that aims to use data science and analytics for community service.

### Sam Coyne

Sam is the Director of Artificial Intelligence at Georgia Pacific. He received his B.S. from the University of Tennessee, and M.S. from Southern Methodist University. His thesis was on "Machine Learning Predictions of No-Show Appointments in a Primary Care Setting". His Skills include, Python, R, SQL, SAS, time series analysis, predictive maintenance of industrial automation devices.

### Susan Daniel

Susan is an experienced scientist with a demonstrated history of working in the pharmaceutical and medical device industries. This includes business process design, quality management, business intelligence, and partnering with industry regulators such as the U.S. Food and Drug Administration (FDA). Susan is a strong technical professional and people leader. She graduated with a Bachelor of Science in Cellular Biology from UGA, earned a Master in Business Administration from UGA, and is pursuing a Master of Arts in Extension Studies (Biotechnology) from Harvard University. She is currently a Senior Microbiologist at Janssen/Johnson and Johnson.

### Mary Elizabeth Dooley Desper

Mary Beth is a proud alumna of the University of Georgia and local Athens native. She began her journey within the J&J Georgia Campus in 2013 and has held her current role as a Janssen Pharmaceuticals EHS Specialist for the past two years.

## James Pestrak

James earned his MA in Economics from the University of Georgia and served on the Terry College of Business Silicon Valley Advisory Council from 2017–2019. He has previously worked at Disney, Electronic Arts, and Nordstrom before joining Chewy in 2020. He and his colleagues are responsible for providing forecasts used for operational, tactical, and strategic purposes by supply chain partners at Chewy.

## Amil Williamson

Amil Williamson completed his Ph.D. at The University of Tennessee in 2019 in Management Science with a concentration in Applied Statistics. His dissertation, entitled: “Essays in Analytics and Econometrics”, explores: (1) the development of a pure test of idiosyncratic endogeneity in the presence of time constant heterogeneity in both balanced and unbalanced longitudinal data settings for nonlinear panel models, (2) The estimation of generalized additive mixed effects models for count, longitudinal data containing parametric factor smooths, and (3) The extension of the forecasting combination model of Granger and Ramanathan by approximating the optimal conditional mean solution employing conditional quantiles while utilizing L1 regularization for discarding uninformative forecasters at arbitrary quantiles of the response. He currently works as a data scientist at Georgia-Pacific LLC (CSC), supporting the data science needs related to both the corrugated and electrical asset health teams.

# Program

## List of Sessions

**Wednesday, April 28, 2021**

<b>Time</b>	<b>Session</b>
4:00–4:20	Introduction <ul style="list-style-type: none"><li>● S. Jack Hu, Provost, University of Georgia</li><li>● Alan Dorsey, Dean, Franklin College of Arts and Sciences, UGA</li></ul>
4:20–4:55	Undergraduate Presentations <ul style="list-style-type: none"><li>● Introduction</li><li>● Runner-up teams</li><li>● Winning Team</li></ul>
4:55–5:00	Break
5:00–5:25	Graduate Presentations <ul style="list-style-type: none"><li>● Runner-up team</li><li>● Winning Team</li><li>● Concluding Remarks</li></ul>
5:25–5:30	Break
5:30–6:15	Career Panel Moderators: Will Cranford, Jeevan Jankar, Chloe Phelps, Lauren Wilkes
6:15–6:45	Closing Ceremony <ul style="list-style-type: none"><li>● Closing Remarks and Award distribution, Dr. Mohamad Al Lawati</li><li>● Vote of thanks, T. N. Sriram, Head, Department of Statistics, UGA</li></ul>

Use the zoom link <https://zoom.us/j/91997158397>



## Participating Teams

### Participating Teams

#### Undergraduate Teams

Team Leader	Team Member 1	Team Member 2	Team Member 3
Andrew Benecchi	Griffin Hines	Nicholas Kreitz	
Arman Spinola	Andrew J Marsh	Ethan Boos	Daniel Kim
Ayush Kumar	Faisal Hossain	Chloe Phelps	
Bryce Davis	Ted Woodsides	Anderson Molter	Taylor Last
Calvin Butson	Sadiq Salewala	Davis York	Juan Sebastian Rodriguez
Daniel Leeds	Genki Aikawa	Steven Zhang	
Lauren Rose Wilkes	Elise Karinshak	Raj Patel	
Lilly Sharples	Kavya Ahuja	Nachiket Hinge	Lakshmi Pushyami Yetukuri
Orr Shalev	Antoine Nadaud	Noam Kleinman	Jacob Salomon
Will Matray	Thomas Hills	Patrick Necessian	Hayden Dessommes

## Graduate Teams

Team Leader	Team Member 1	Team Member 2	Team Member 3
Cody Dailey	Ishaan Dave	Yang Ge	Vipul Shinde
Farid Gharehmo- hammadi	Ehsan Asali	Farzan Shenavarmasouleh	
Huimin Hu	Duna Zhan	Kaiwen Han	Yeongmi Jeong
Jeevan Jankar	Will Cranford	Dan Luo	Qian Zhang
Jialin Yang	Jiacheng Li	Weifeng Wang	Cheng Chen
Joshua Watson	Eric Suter	Matthew Becton	
Mohammad Toutiaee		Nikhil Ranjan	Kushajveer Singh
Rex VanHorn	Gianni Orlando	Clint Morris	Kadir Bice
Subham Das	Greg Ellison	Hongju Park	
Tianyi Zhang	Shiyuan Deng	Beibei Xu	Xunan (Sara) Shen
Twinkle Roy	Raghav Goyal	Whit Weinmann	Chong (Andrea) Zhao
Wanxue Zou	Qidi Liu	Jiawei Xiong	Jordan Wheeler
Xingyang Li	Shanshan Lian	Zhaiming Shen	Zizhe Hu
Yanzhe Yin	Peter Hawman	Tyler Lynn	Yangjiaxin Wei
Zhizhong Lin	Yu Wang	Xiaochuan Li	Mengyun Yu
Zhongliang Zhou	Wayland Yeung	Yuanyi Zhang	Cong Cheng



## Mentoring

### Mentors

Statistics Faculty:           Dr. Xianyan Chen  
  Dr. Monsur Chowdhury  
  Dr. Dan Hall  
  Dr. Abhyuday Mandal  
  Dr. Jaxk Reeves

Computer Science Faculty:   Dr. Jaewoo Lee

Mentoring was available only to the undergraduate teams. The mentors met with multiple teams based on a weekly schedule. Mentors were only allowed to provide general advice on data processing and modeling, possible interpretations of results, and good practices in writing reports and presentations— not specific advice on how students should model the dataset. Also, the mentors did not have access to the datasets. They only knew the goals of the study and the project expectations. Each mentoring session was recorded and posted on the UGA eLC.

## Mentoring Schedule

Timings	Wednesday 3/24	Thursday 3/25	Friday 3/26	Sunday 3/28
8 – 9am			XY Chen	
4 – 5pm			Dan Hall	Chowdhury
5 – 6pm			Jaewoo Lee	
6 – 7pm	Info Session	Info Session and Q&A		
8 – 9:30pm		J. Reeves		

Timings	Monday 3/29	Tuesday 3/30	Wednesday 3/31	Thursday 4/1	Friday 4/2	Sunday 4/4
8 – 9am					XY Chen	
12 – 1pm	XY Chen					
3 – 4pm	Chowdhury					
4 – 5pm	Chowdhury				Dan Hall	Chowdhury
5 – 6pm	Jaewoo Lee		Jaewoo Lee			
6 – 7pm	Q&A					
8 – 9:30pm		J. Reeves		J. Reeves		

Timings	Monday 4/5	Tuesday 4/6	Wednesday 4/7	Thursday 4/8	Friday 4/9	Sunday 4/11
8 – 9am					XY Chen	
12 – 1pm	XY Chen				Mandal	
3 – 4pm	Chowdhury					
4 – 5pm	Chowdhury		Chowdhury		Dan Hall	Chowdhury
5 – 6pm			Jaewoo Lee		Jaewoo Lee	
6 – 7pm	Q&A					
8 – 9:30pm		J. Reeves		J. Reeves		

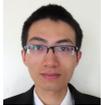
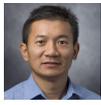
Timings	Monday 4/12	Tuesday 4/13	Wednesday 4/14
12 – 1pm	XY Chen		
3 – 4pm	Chowdhury		
4 – 5pm	Chowdhury		Chowdhury
5 – 6pm	Jaewoo Lee		Jaewoo Lee
6 – 7pm			
8 – 9:30pm		J. Reeves	

Use the zoom link <https://zoom.us/j/91997158397>

# Virtual Presentations

## Oral Presentations

### Panel 1 - Graduate Teams

Judges	Date	Teams				
 	4/21 (5–6pm)	Zhou	Yeung	Zhang	Cheng	
	4/21 (6–7pm)	Zhang	Jankar	Cranford	Luo	
	4/22 (5–6pm)	Zou	Liu	Xiong	Wheeler	
	4/22 (6:30–7:30pm)	Roy	Goyal	Weinmann	Zhao	

Zoom link <https://zoom.us/j/96117056529>

### Panel 2 - Graduate Teams

Judges	Date	Teams				
 	4/21 (5–6pm)	Zhan	Hu	Han	Jeong	
	4/21 (6–7pm)	Ghareh-mohammadi	Asali	Shenavarmasouleh		
	4/21 (7–8pm)	Dailey	Dave	Ge	Shinde	

Zoom link <https://zoom.us/j/94249723163>

### Panel 3 - Graduate Teams

Judges		Date	Teams			
 		4/21 (5–6pm)	Li	Lian	Shen	Hu
		4/21 (6–7pm)	Yin	Hawman	Lynn	Wei
		4/21 (7–8pm)	Lin	Wang	Li	Yu

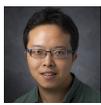
Zoom link <https://zoom.us/j/94831747430>

### Panel 4 - Graduate Teams

Judges		Date	Teams			
 		4/21 (5–6pm)	Yang	Li	Wang	Chen
		4/21 (6–7pm)	Zhang	Shen	Deng	Xu
		4/22 (5–6pm)	Watson	Suter	Becton	

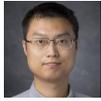
Zoom link <https://zoom.us/j/97953802370>

### Panel 5 - Graduate Teams

Judges		Date	Teams			
 		4/21 (5–6pm)	Toutiaee	Singh	Ranjan	
		4/21 (6–7pm)	VanHorn	Orlando	Morris	Bice
		4/21 (7–8pm)	Das	Ellison	Park	

Zoom link <https://zoom.us/j/93938328887>

### Panel 6 - Undergraduate Teams

Judges		Date	Teams			
 		4/21 (6–7pm)	Davis	Woodsides	Molter	Last
		4/21 (7–8pm)	Wilkes	Karinshak	Patel	
		4/21 (9–10pm)	Sharples	Ahuja	Hinge	Yetukuri

Zoom link <https://zoom.us/j/98268360124>

### Panel 7 - Undergraduate Teams

Judges		Date	Teams			
 		4/21 (5–6pm)	Leeds	Aikawa	Zhang	
		4/21 (6–7pm)	Shalev	Nadaud	Kleinman	Salomon
		4/21 (7–8pm)	Matray	Hills	Nercessian	Dessommes

Zoom link <https://zoom.us/j/93929393287>

### Panel 8 - Undergraduate Teams

Judges		Date	Teams			
 		4/21 (5–6pm)	Kumar	Hossain	Phelps	
		4/21 (6–7pm)	Benecchi	Hines	Kreitz	
		4/21 (7–8pm)	Kim	Spinola	Marsh	Boos
		4/21 (8–9pm)	Butson	Salewala	York	Rodriguez

Zoom link <https://zoom.us/j/95897088505>

A close-up photograph of a red and white knitted fabric, possibly a sweater or scarf, with a black hook visible in the upper right corner. The fabric is textured and shows some fraying at the edges.

## Winning Teams

## Undergraduate Teams

### Winner



Bryce Davis  
Statistics



Taylor Last  
Statistics



Ted Woodsides  
Statistics



Anderson Molter  
Computer Science

### Runner-up



Orr Shalev  
Computer Science



Antoine Nadaud  
Mechanical Engg



Noam Kleinman  
MIS, Economics



Jacob Salomon  
Data Science



Ayush Kumar  
Data Science



Faisal Hossain  
Computer Science



Chloe Phelps  
Data Science

### Honorable Mentions

#### Team 1

1. Will Matray
2. Thomas Hills
3. Patrick Nercessian
4. Hayden Dessommes

#### Team 2

1. Lauren Rose Wilkes
2. Elise Karinshak
3. Raj Patel

## Graduate Teams

### Winner



Jeevan Jankar  
Statistics



Will Cranford  
Statistics



Dan Luo  
Statistics



Qian Zhang  
Educational Psychology

### Runner-up



Zhizhong Lin  
Statistics



Yu Wang  
Statistics



Xiaochuan Li  
Statistics



Mengyun Yu  
Statistics

### Honorable Mentions

#### Team 1

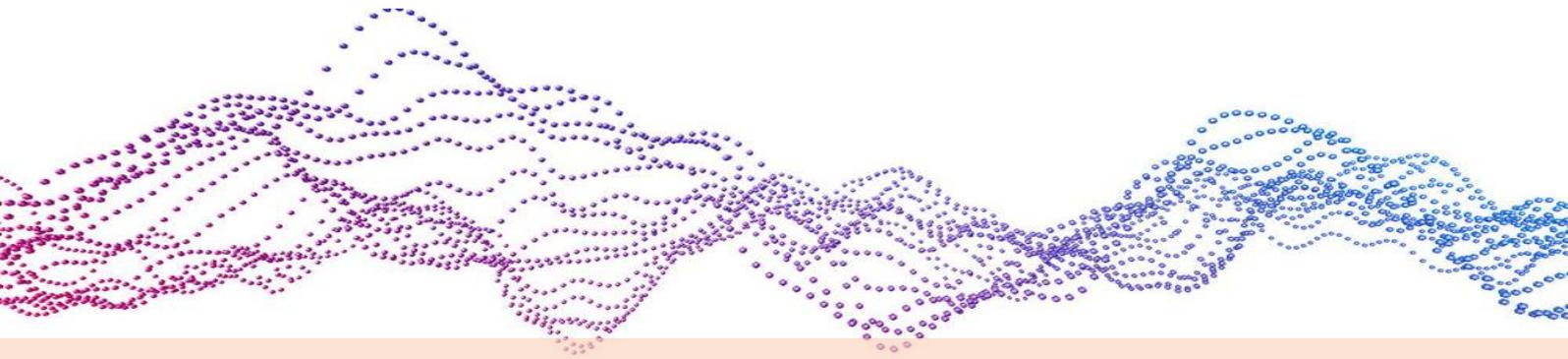
1. Twinkle Roy
2. Raghav Goyal
3. Whit Weinmann
4. Chong (Andrea) Zhao

#### Team 2

1. Jialin Yang
2. Jiacheng Li
3. Weifeng Wang
4. Cheng Chen

#### Team 3

1. Huimin Hu
2. Duna Zhan
3. Kaiwen Han
4. Yeongmi Jeong



# 2021 UGA Data Science Competition



**April 28, 2021**

**Hosted by:**

**Department of Statistics**



UNIVERSITY OF  
**GEORGIA**

