

# Data Science Summer Camp Staff and CA Schedule

## **Program Directors:**

Tianxi Cai, Professor of Translational Data Science, Harvard Medical School, Dept of Biomedical Informatics

Jessica Gronsbell, Assistant Professor, University of Toronto, Dept. of Statistical Sciences

## **Instructors:**

Jessica Gronsbell, Assistant Professor, University of Toronto, Dept. of Statistical Sciences

Junwei Lu, Assistant Professor, Harvard School of Public Health, Dept. of Biostatistics

Kun-Hsing Yu, Assistant Professor of Biomedical Informatics, Harvard Medical School

Peter Potash, Senior Researcher at Microsoft Turing Montreal

## **Teaching Assistants:**

[Thong Ngo](#)

[Winston Cai](#)

[Evan Yang](#)

## **Program Staff:**

Sharon Qi, Adjunct Faculty, School of Global Innovation and Leadership, Lucas College and Graduate School of Business

San Jose State University

Amanda King, Program Manager, Harvard School of Public Health, Dept of Biostatistics

Mo Moro, Project Coordinator, Harvard Medical School

[https://celehs.hms.harvard.edu/camp\\_instructors.html](https://celehs.hms.harvard.edu/camp_instructors.html)

[https://celehs.hms.harvard.edu/camp\\_team.html](https://celehs.hms.harvard.edu/camp_team.html)

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## **Orientation**

**Where:** Sweeney Hall 231, San Jose State University

**Time:** July 7th | 8:00 -10:30 AM

8:00 AM - 8:15 AM	Meet students at drop-off location and walk to SH 231
8:30 AM - 9:00 AM	Livestream: Introduction to the program by Tianxi/Junwei
9:00 AM - 9:45 AM	Q/A session and closing remarks + Snack + Socializing
9:45 AM - 10:00 AM	TA Introductions + Program Overview
10:00 AM	Ice Breaker Activities

## Week 1

**Time:** July 10-14 | 8:30 AM - 2:30 PM

<b>Time</b>	<b>Activity</b>	<b>Speaker</b>
8:30 - 9:30	Bootcamp: Introduction to Programming/Python	Local TAs
9:40 - 10:05	Practice + Q&A	Local TAs
10:15 - 11:05	Career talk	7/10 Layla Parast, University of Texas at Austin 7/11 Xuming He, University of Michigan 7/12 Benjamin Sanchez, Google Inc 7/13 Maria Pacheco, University of Colorado 7/14 James Zou, Stanford University
11:15 - 12:00 PM	More practice and Q&A	Local TAs
12:00 - 12:45	Lunch	
12:45 - 2:30	Office Hours and Car Troubleshooting	Local TAs

## Week 2

Time: July 17-21 | 8:30 AM - 2:30 PM

### Monday, July 17

CA Time	Activity	Topic	Instructors
8:30 -9:15 AM	Introduction and Lecture on Statistics/ML	Conceptual introduction to data science	Jesse Gronsbell
9:25 - 10:15	Programming Practice	Exploratory Data Analysis	TAs
10:15 - 11:05	Career talk		Marzyeh Ghassemi, MIT
11:15 - 12:00 PM	Lecture on AI/ML	Conceptual introduction to deep learning and AI	Peter Potash
12:10 - 1:00PM	Programming Practice	Intro to NN	TAs
1:00-1:45	Lunch		
1:45 - 2:30	Office Hours/Car Troubleshooting		TAs

### Tuesday, July 18

CA Time	Activity	Topic	Instructors
	Troubleshooting		TAs
8:30 -9:15 AM	Lecture on Statistics/ML	Least squares + Logistic Regression	Jesse Gronsbell
9:25 - 10:15	Programming Practice	Logistic regression	TAs
10:15 - 11:05	Career talk		Rebecca Hubbard, UPenn

11:15 - 12:00 PM	Lecture on AI/ML	Introduction to Convolutional Neural Networks	Kun-Hsing Yu
12:10 - 1:00PM	Programming Practice	Introduction to Convolutional Neural Networks Part 1	TAs
1:00-1:45	Lunch		
1:45 - 2:30	Office Hours/Car Troubleshooting		TAs

### Wednesday, July 19

CA Time	Activity	Topic	Instructors
	Troubleshooting		TAs
8:30 -9:15 AM	Lecture on Statistics/ML	Model Evaluation	Jesse Gronsbell
9:25 - 10:15	Programming Practice	Introduction to Convolutional Neural Networks Part 2	TAs
10:15 - 11:05	Career talk		Ana Kenny, UC Berkeley
11:15 - 12:00 PM	Lecture on AI/ML	Computer vision and convolution neural network	Junwei Lu
12:10 - 1:00PM	Programming Practice	Introduction to Convolutional Neural Networks Part 3	TAs
1:00-1:45	Lunch		
1:45 - 2:30	Office Hours/Car Troubleshooting		TAs

### Thursday, July 20

CA Time	Activity	Topic	Instructors
	Troubleshooting + taking images		TAs

8:30 -9:15 AM	Lecture on Statistics/ML	Clustering	Jesse Gronsbell
9:25 - 10:15	Programming Practice w real data	Clustering Notebook	TAs
10:15 - 11:05	Career talk		Larry Han, Northeastern University
11:15 - 12:00 PM	Lecture on AI/ML	Reinforcement learning	Junwei Lu
12:10 - 1:00PM	Programming Practice	Transfer learning CNN	TAs
1:00-1:45	Lunch		
1:45 - 2:30	Office Hours/Car Troubleshooting		TAs

### Friday, July 21

CA Time	Activity	Topic	Instructors
	Car Working + Presentation		TAs
8:30 -9:15 AM	Lecture on Statistics/ML	Health data science	Jesse Gronsbell
9:25 - 10:15	Programming Practice	Chest x-ray dataset exercise	TAs
10:15 - 11:05	Career talk		Aaron Sonabend, Google
11:15 - 12:00 PM	Last Lecture	Data science resources	TAs
12:15 - 1:00	Final presentation		Both MA and CA site screen share

## **Parking Instruction for SJSU**

Parents/Students can purchase Single Day or Hourly permits through the [ParkMobile app](#) or Paystation. We highly recommend using the app.

Please park at South Garage. There is a [passenger drop off area](#) nearby right past the garage entrance.

[South Garage](#) (377 S 7th St, San Jose, CA 95192), Section 3A, Section 4H, or 1st Floor exterior. 15 minute free parking is available.

Google Map Pin for [Drop Off Area](#). On orientation day, we will have a TA/Volunteer to wait for students at the drop off area from 8:00 - 8:15 AM and walk with them to the classroom.

Dine on Campus (SJSU)

Students should bring their own lunches. Our Student Union is open for the summer. Click [here](#) to see a list of vendors and hours of operation.

## **Laptops**

If you have your own laptop, we suggest that you bring it so you can work on programming sessions independently. If you don't, that's ok - we will have computers you can use together.

## **Primary Contact**

If you have any questions, please contact Thong at [thong.ngo@sjsu.edu](mailto:thong.ngo@sjsu.edu)