

CASOS Summer Institute 2022

Day 0 – Set Up

Sunday, 6/12/22

Times	Activity	CASOS TA Staff for Sunday
TBD US Eastern	*Assistance with loading software and data on machines/Troubleshoot access issues	Online and in-person assistance

The focus of Sunday:

- 1) helping participants get the software onto their machines and loading properly.
- 2) helping the participants load their data into the tools.
- 3) provide some one-on-one support to participants having access issues.

****SUNDAY IS NOT A REQUIRED DAY FOR PARTICIPANTS. Sessions begin on Monday June 13, 2022. Breakfast and lunch will be provided for in-person attendees throughout instruction days but not on Sundays. Breakfast will be available the hour prior to the start of each instruction day.***

Online participants will be able to join sessions live via Zoom during instruction days. If you join remotely, members of the CASOS team will be online to answer questions during live sessions.

All sessions will be recorded. Videos of the sessions and case studies will be available for all participants through July 15, 2022.

CASOS PhDs, Post Doctorates, and Technical Staff:

Luliia Alieva, PhD	Christine Lepird	Jon Storrick
Mihovil Bartulović, PhD	Tom Magelinski	Josh Uyheng
Daniele Bellutta	JD Moffitt	Evan Williams
Janice Blane	Isabel Murdock	Michael Miller Yoder, PhD
Stephen Dipple, PhD	Lynnette Ng	
Geoff Dobson	Luke Osterritter	
Catherine King	Samantha Phillips	
Charity King	Jeff Reminga	
Mike Kowalchuck	Dawn Robertson	

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Day 1 – Overview and Getting Started

Monday, 6/13/22

LIVE INSTRUCTION SCHEDULE <i>All Times US Eastern</i>		
<u>Time</u>	<u>Lecture/Presentation</u>	<u>Instructor</u>
9:00am – 9:10am	Welcome	Prof. Kathleen M. Carley
9:10am – 11:00am	Dynamic Network Analysis Overview & Basics	Prof. Kathleen M. Carley (Lecture)
11:00am – 12:00pm	DNA - key metrics	Prof. Kathleen M. Carley (Lecture)
LUNCH BREAK 12:00pm – 1:00pm		
1:00pm – 2:00pm	ORA – Basic Interface, Import CSV file, Key Entity Report, Citation import, Citation report	Jeff Reminga (Hands On)
2:00pm – 3:00pm	ORA – Visualizer Basics	Jon Storrick (Hands On)
BREAK 3:00pm – 3:15pm		
3:15pm – 4:15pm	Groups & Topology	Prof. Kathleen M. Carley (Lecture)
4:15pm – 5:15pm	ORA – Group Report, using attributes in Group Report, Reports with 2 or more meta-networks, finding which measure is in which report	Jeff Reminga (Hands On)
6:30pm – 8:00pm	Welcome Reception	All in-person participants and CASOS Center faculty, students and staff

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Day 2 – Data

Tuesday, 6/14/22

LIVE INSTRUCTION SCHEDULE		
<i>All Times US Eastern</i>		
<u>Time</u>	<u>Lecture/Presentation</u>	<u>Instructor</u>
9:00am – 9:10am	Where does the data come from?	Prof. Kathleen M. Carley (Lecture)
9:10am – 10:15am	Text to Networks & Semantic Networks	Prof. Kathleen M. Carley (Lecture)
BREAK 10:15am – 10:30am		
10:30am – 11:30am	NetMapper	Dawn Robertson (Hands On) <i>(Charity King)</i>
11:30am – 12:00pm	Edit Data, Create Thesauri or Delete List, Apply functions to Many Files	Jeff Reminga (Hands On)
LUNCH BREAK 12:00pm – 1:00pm		
1:00pm – 1:30pm	LDA, LSA for Topic Modeling in ORA	Joshua Uyheng (Hands On) <i>(Charity King)</i>
1:30pm – 2:15pm	Stance Detection & Clustering	Daniele Bellutta (Hands On) <i>(Sam Phillips)</i>
2:15pm – 3:00pm	Dynamic Networks for Social Media	Prof. Kathleen M. Carley (Lecture)
BREAK 3:00pm – 3:15pm		
3:15pm – 4:00pm	BEND & Community Assessment	Prof. Kathleen M. Carley (Lecture)
4:00pm – 4:45pm	BEND Tutorial	Janice Blane (Hands On)
4:45pm – 5:15pm	Semantic Report	Charity King (Hands On)
5:15pm – 6:30pm	Q&A Sessions/Help with Software	In person Participants and TA's – by appointment
ASSOCIATED PRE-TAPED CASE STUDY VIDEOS:		
TBD		

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Day 3 – Basic Analysis

Wednesday, 6/15/22

LIVE INSTRUCTION SCHEDULE		
<i>All Times US Eastern</i>		
<u>Time</u>	<u>Lecture/Presentation</u>	<u>Instructor</u>
9:00am – 9:45am	Centralities, redundancies, cognitive demand - Key Entity Report, Management Report	Daniele Bellutta
9:45am – 10:30am	Metric Based Comparison	Evan Williams (Hands On)
BREAK 10:30am – 10:45am		
10:45am – 11:30pm	One and Two Mode Metrics, Folding	Catherine King (Hands On)
11:30am – 12:00pm	Prediction and Comparison of Networks	Catherine King (Hands On)
LUNCH BREAK 12:00pm – 1:00pm		
1:00pm – 2:00pm	Advanced Visualization, Big Data	Jon Storrick (Hands On)
2:00pm – 3:00pm	Visualizing Change in Networks	Jon Storrick (Hands On)
BREAK 3:00pm – 3:15pm		
3:15pm – 4:00pm	MRQAP and Regression, Visualize Distributions How to put network metrics in regressions	Jeff Reminga (Hands On)
4:00pm – 4:30pm	Clustering - Unimodal, to Cluster Ensembling, to Multi-Modal Clustering	Tom Magelinski (Hands On) <i>(Evan Williams)</i>
4:30pm – 5:15pm	Story-Based Dynamics	Tom Magelinski <i>(Evan Williams)</i>
5:15pm – 6:30pm	Q&A Sessions	In person Participants and TA's – by appointment
ASSOCIATED PRE-TAPED CASE STUDY VIDEOS:		
TBD		

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Day 4 – Dynamics & Spatial Reasoning

Thursday, 6/16/22

LIVE INSTRUCTION SCHEDULE <i>All Times US Eastern</i>		
<u>Time/Duration</u>	<u>What</u>	<u>Instructor</u>
9:00am – 10:15am	Dynamics: Reasoning About Networks Over Time	Prof. L. Richard Carley (Lecture)
BREAK 10:15am – 10:30am		
10:30am – 11:00am	Fourier Analysis, change detection <i>Follow along</i>	Prof. L. Richard Carley (Lecture)
11:00am – 11:30am	Geo-temporal Networks and Visualization	Prof. L. Richard Carley (Lecture)
11:30am – 12:00pm	Geo-Spatial Visualization	Jon Storrick (Hands On)
LUNCH BREAK 12:00pm – 1:00pm		
1:00pm – 1:45pm	Collecting and Analyzing Twitter Data Best Practices	JD Moffitt (Lecture and Hands On) <i>(Charity King)</i>
1:45pm – 2:15pm	Twitter Importers, Twitter Report Reddit Importer, Reddit Report	Jeff Reminga (Hands On)
2:15pm – 2:45pm	Twitter De-identification and Microvisualizations	Jon Storrick (Hands On)
BREAK 2:45pm – 3:00pm		
3:00pm – 3:45pm	Finding Trolls	Joshua Uyheng (Hands On)
3:45pm – 4:30pm	Finding Bots	Lynnette Ng (Hands On) - pretaped
4:30pm – 5:15pm	Artemis	Mihovil Bartulović, PhD
5:15pm – 6:30pm	Q&A Sessions	In person Participants and TA's – by appointment
ASSOCIATED PRE-TAPED CASE STUDY VIDEOS:		
TBD		

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Day 5 – Simulation

Friday, 6/17/22

LIVE INSTRUCTION SCHEDULE <i>All Times US Eastern</i>		
<u>Time</u>	<u>Lecture/Presentation</u>	<u>Instructor</u>
9:30am – 10:15am	Social Influence Theory	Prof. Kathleen M. Carley (Lecture)
BREAK 10:15am - 10:30am		
10:30am – 11:00am	Trails and Networks: From Trails to Networks and Higher-order Networks	Mihovil Bartulović, PhD
11:00am – 11:30am	Trails and Networks: Loom; Network representation of Trails	Mihovil Bartulović, PhD
11:30am – 12:00pm	Synthetic Networks	Luke Osterritter (Lecture) <i>(Sam Phillips)</i>
LUNCH BREAK 12:00pm – 1:00pm		
1:00pm – 1:30pm	Immediate Impact Analysis	Tom Magelinski (Hands On) <i>(Catherine King)</i>
1:30pm – 2:30pm	Agent Based Modeling - Intro	Prof. Kathleen M. Carley <i>(Geoff Dobson)</i>
2:30pm – 3:00pm	Virtual Experiments	Luke Osterritter (Hands On) <i>(Isabel Murdock)</i>
BREAK 3:00pm – 3:15pm		
3:15pm – 3:45pm	Micro-Simulations in ORA	Isabel Murdock (Hands On)
3:45pm – 5:15pm	Construct and Construct API	Stephen Dipple, PhD (Hands On)
5:15pm – 6:30pm	Q&A Sessions	In person Participants and TA's – by appointment
ASSOCIATED PRE-TAPED CASE STUDY VIDEOS:		
TBD		

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Day 6 – Advanced Issues

Saturday, 6/18/22

LIVE INSTRUCTION SCHEDULE <i>All Times US Eastern</i>		
<u>Time</u>	<u>Lecture/Presentation</u>	<u>Instructor</u>
9:00am – 9:45am	Triad Census	Luke Osterritter (Lecture and Hands On)
9:45am – 10:15am	Handling Large Data Sets	Jeff Reminga (Hands On)
BREAK 10:15am – 10:30am		
10:30am – 11:00am	Ego Network Reports	Jeff Reminga (Hands On)
11:00am – 11:30am	Polarization	Sam Phillips (Hands On)
11:30am – 12:00pm	Using Network Analysis to support Qualitative Analysis	Iuliia Alieva, PhD (Lecture)
LUNCH BREAK 12:00pm – 1:00pm		
1:00pm – 1:30pm	Machine Learning Models in ORA	Mike Kowalchuck (Hands On)
1:30pm – 2:30pm	Analyzing Networks Across Social Media Platforms	Isabel Murdock (Hands On)
2:30pm – 3:00pm	Collecting and Analyzing Reddit Data Best Practices and analyzing in ORA	Christine Lepird (Lecture and Hands On)
3:00pm – 5:00pm	Q&A Sessions	In person Participants and TA's – by appointment
ASSOCIATED PRE-TAPED CASE STUDY VIDEOS:		
TBD		

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Day 7 – One on One

Extra Sunday 6/19/22

<u>*By appointment</u>	<u>Instructor</u>
<p>Break-out sessions on tools and individualized training (in-person participants only)</p> <p><i>**During the week we will be grouping together in-person participants with members from CASOS. This day is optional and for anyone who needs further instruction. Timings will be established with TA's and participants</i></p>	<p>All CASOS TA's</p>