

CASOS Summer Institute 2017

Day 0 – Set Up

Saturday, 6/3/17

TBD	Set Up and Individualized Data Entry	CASOS TA Staff for Sunday	
	Put up posters	Sienna	Sienna
	Put up signs	Sienna	Sienna
	Load participant machines		

The focus of Saturday is for one-on-one extra help in

- 1) getting the software onto the participants machines
- 2) helping the participants load their data into the tools
- 3) and providing some one-on-one support or small group support focused around the participants interest

Saturday is not a required day for participants. It is optional.

Lectures and common instruction begin on Sunday June 4, 2017.

CASOS PhDs and Master's Students:

Geoff Morgan	Geoff Dobson
Sumeet Kumar	Ramon Villa Cox
Binxuan Huang	Adam Tse
Thomas Magelinski	Shivam Gupta

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Day 1 – Overview and Getting Started

Sunday, 6/4/17

<u>Time</u>	<u>What</u>	<u>Instructor</u>	<u>TA's</u>
08:00 - 08:30	Breakfast & Registration - start making sure software is on machines		All CASOS Students
08:30 - 08:40	Welcome	Prof. Kathleen M. Carley	
08:40 - 10:45	Dynamic Network Analysis Overview	Prof. Kathleen M. Carley	ALL CASOS
10:45 - 11:00	Break		
11: 00 - 12:30	DNA - key metrics	Prof. Kathleen M. Carley	ALL CASOS
12:30 - 13:30	Lunch - & make sure software is on machines		ALL CASOS students
13:30 – 14:30	ORA – Basic Interface, Import CSV file, email import, Key entity report, Standard Social Network	Jeff Reminga	ALL CASOS students
14:30– 15:00	Twitter import, citation import, and Twitter Report, Super Spreaders, Super Friends Use case	Jeff Reminga	ALL CASOS students
15:00- 15:30	Break		
15:30-16:30	Groups & Topology	Prof. Kathleen M. Carley	ALL CASOS
16:30 -17:30	ORA – Group Report, Reports with 2 or more meta-networks	Jeff Reminga	ALL CASOS students
17:30 - 18:00	Pictures	All SI and All CASOS Faculty, Staff and Students	
18:00 - 20:00	Reception	All CASOS Center Invited	

ALL CASOS students	Geoffrey Morgan, Geoff Dobson, Sumeet Kumar, Binxuan Huang, Ramon Villa Cox, Adam Tse, Shivam Gupta, Thomas Magelinski
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Day 2 – Data

Monday, 6/5/17

<u>Time</u>	<u>What</u>	<u>Instructor</u>	<u>TA's</u>
08:00 - 08:15	Breakfast Continental		
08:15- 08:30	Where does the data come from?	Prof. Kathleen M. Carley	ALL CASOS students
08:30-10:15	Text to Networks & Semantic Networks	Prof. Kathleen M. Carley	ALL CASOS students
10:15 - 10:30	Break		
10:30 - 11:30	AutoMap	Neal Altman	ALL CASOS students
11:30-12:00	Thesauri and Delete, Edit Data, Apply to Many Files	Jeff Reminga	ALL CASOS students
12:00 - 13:00	Lunch		
13:00-13:30	Case Study: Fake News & Cyber Attacks	Sumeet Kumar	ALL CASOS students
13:30-15:00	Key Actors and Groups in Twitter Use Case	Prof. Kathleen M. Carley & Jeff Reminga	ALL CASOS students
15:00 - 15:30	Break		
15:30 - 17:00	Rhetorical Analysis Use Case Semantic network report	Neal Altman & Jeff Reminga	ALL CASOS students
17:00 - 18:45	Small Group Work: Hands On	ALL	ALL CASOS students

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Day 3 – Basic Analysis

Tuesday, 6/6/17

<u>Time</u>	<u>What</u>	<u>Instructor</u>	<u>TA</u>
08:00 - 08:15	Breakfast Continental		
08:15- 09:15	Centralities, redundancies, cognitive demand - Measures and Reports	Geoff Dobson	ALL CASOS students
09:15 - 10:15	One and Two Mode Metrics, Assessing Change, Folding	Ramon Villa Cox	ALL CASOS students
10:15 - 10:30	Break		
10:30 - 11:00	Metric Based Comparison of Networks Graph and Node Level Metrics Key entity, Group, Twitter reports	Sumeet Kumar	ALL CASOS students
11:00 - 12:00	Groups and Meta-nodes – Visualization techniques Attributes	Jon Storrick	ALL CASOS students
12:00 - 13:00	Lunch		
13:00-13:30	Case Study: NetFlow Analysis	Geoff Dobson	ALL CASOS students
13:30-14:30	Prediction and Comparison of Two or More Networks: Hamming Distance, Correlation, QAP, MRQAP	Ramon Villa Cox	ALL CASOS students
14:30-15:00	MRQAP and Regression How to put network metrics in regressions	Jeff Reminga	ALL CASOS students
15:00 - 15:30	Break		
15:30-16:45	Visualizing Differences Due to Attributes Tiles	Jon Storrick	ALL CASOS students
16:45-17:00	Twitter De-identification	Jon Storrick	ALL CASOS students
17:00 - 18:45	Small Group Work: Hands On	ALL	ALL CASOS students

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Day 4 – Dynamics & Spatial Reasoning

Wednesday, 6/7/17

<u>Time</u>	<u>What</u>	<u>Instructor</u>	<u>TA's</u>
08:00 - 08:30	Breakfast Continental		
08:30 - 10:15	Dynamics: Reasoning About Networks Over Time	Prof. L. Richard Carley	ALL CASOS students
10:15 - 10:30	Break		
10:30 - 12:00	Fourier Analysis, change detection Follow along	Prof. L. Richard Carley	ALL CASOS students
12:00 - 13:00	Lunch		
13:00 – 13:30	Case Study: Change In Organizations	Geoff Morgan	ALL CASOS students
13:30 - 14:30	Geo-Spatial Visualization & Region Viewer	Jon Storrick	ALL CASOS students
14:30-15:00	Visualizing Change in Networks: Dynamics, Path Finder, movement on maps	Jon Storrick	ALL CASOS students
15:00-15:30	Break		
15:30-16:00	Generating Synthetic Networks in ORA	Sumeet Kumar	ALL CASOS students
16:00-16:30	Micro-Simulations in ORA	Ramon Villa Cox	ALL CASOS students
16:30-17:00	Immediate Impact Analysis	Geoff Morgan	ALL CASOS students
17:00 - 18:45	Small Group Work: Hands-on	Group Leads: TBD	ALL CASOS students

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Day 5 – Network Simulation

Thursday, 6/8/17

<u>Time</u>	<u>What</u>	<u>Instructor</u>	<u>TA's</u>
08:00 - 08:30	Breakfast Continental		
08:30 - 9:30	Agent Based Modeling	Geoff Morgan	ALL CASOS students
09:30 - 10:30	Constructural Theory	Geoff Morgan	ALL CASOS students
10:30 - 10:45	Break		
10:45 - 11:15	Case Study: Cyber-Fit	Geoff Dobson	ALL CASOS students
11:45 - 13:00	Lunch		
13:00 – 13:30	Case Study: Organizations	Geoff Morgan	ALL CASOS students
13:30 - 15:00	Running Construct – Back and Forth with ORA	Geoff Morgan	ALL CASOS students
15:00 - 15:30	Break		
15:30 – 16:00	Virtual Experiments	Geoff Dobson	ALL CASOS students
16:00 – 17:00	Validation Extended Construct	Geoff Morgan	ALL CASOS students
17:00 - 18:30	Small Group Work: Hands On	Group Leads	ALL CASOS students

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Day 6 – Advanced Issues

Friday, 6/9/17

<u>Time</u>	<u>What</u>	<u>Instructor</u>	<u>TA's</u>
08:00 - 08:30	Breakfast Continental		
08:30 - 9:30	Geo-Temporal Networks and Sentiment Mining	Sumeet Kumar	ALL CASOS students
9:30-10:00	Dynamics, Trails and Networks: Loom; Going from Trails to Networks and Networks to Trails	Binxuan Huang	ALL CASOS students
10:00-10:30	Case Study: Trails	Binxuan Huang	ALL CASOS students
10:30 - 10:45	Break		
10:45 – 12:00	Handling Large Data Sets	Jeff Reminga	ALL CASOS students
12:00 - 13:00	Lunch		
13:00 – 13:30	Socio-Cultural Cognitive Mapping	Geoff Morgan	ALL CASOS students
13:30-14:00	Social Influence Theory	Geoff Morgan	ALL CASOS students
14:00-15:00	LDA, LSA	Sumeet Kumar	ALL CASOS students
15:00 - 15:30	Break		
15:30 - 16:00	Collecting Twitter Data	Binxuan Huang	ALL CASOS students
16:00-18:00	Small Group Work: Hands On	Group Leads	ALL CASOS students

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Day 7 – One on One – Extra

Saturday 6/10/2017

<u>Time</u>	<u>What</u>	<u>Instructor</u>
08:00 - 08:30	Breakfast Continental	
08:30 - 10:30	Break out sessions on tools and individualized training	ALL CASOS students
10:30 - 10:45	Break	
10:45 - 12:15	Break out sessions on tools and individualized training	ALL CASOS students
12:15 - 13:15	Lunch	
13:15 - 14:45	Break out sessions on tools and individualized training	ALL CASOS students
14:45 - 15:00	Break	