

Big Data Analysis for Social Scientists
ACSPRI Summer Program 2019 (4 – 8 February, University of Melbourne)

Instructor: Dr Robert Ackland (Australian National University)

Draft Program (31st January 2019)

This is a tentative program: I will adjust the course to suit the interest and needs of participants.

Day 1 (Mon 4th Feb)

9.30-10.30	Welcome and introduction to course Introduction to vosonSML, VOSON Dashboard RStudio and R refresher
10.30-11.00	<i>Morning tea</i>
11.00-12.30	R refresher (cont.) SNA using VOSON Dashboard – 1 (network plots, basic node-/network-level metrics)
12.30-1.30	<i>Lunch</i>
1.30-3.00	SNA in R/igraph – 1 (network plots, basic node-/network-level metrics)
3.00-3.30	<i>Afternoon tea</i>
3.30-5.00	Collecting Twitter data using VOSON Dashboard

Day 2 (Tue 5th Feb)

9.00-10.30	Collecting Twitter data with vosonSML SNA using VOSON Dashboard – 2 (clusters, creating subnetworks)
10.30-11.00	<i>Morning tea</i>
11.00-12.30	SNA in R/igraph – 2 (clusters, creating subnetworks)
12.30-1.30	<i>Lunch</i>
1.30-3.00	Text analysis using VOSON Dashboard Text analysis in R – 1 (text preparation, frequency counts & wordclouds)
3.00-3.30	<i>Afternoon tea</i>
3.30-5.00	Collecting YouTube data with VOSON Dashboard & vosonSML

Day 3 (Wed 6th Feb)

9.00-10.30	Gephi for network visualisation - 1
10.30-11.00	<i>Morning tea</i>
11.00-12.30	Collecting hyperlink networks using VOSON

12.30-1.30	<i>Lunch</i>
1.30-3.00	Collecting Reddit data with VOSON Dashboard & vosonSML Assortativity and homophily – R and VOSON Dashboard
3.00-3.30	<i>Afternoon tea</i>
3.30-5.00	Text analysis in R – 2 (sentiment analysis, semantic networks)

Day 4 (Thu 7th Feb)

9.00-10.30	Dynamic network analysis in R - 1
10.30-11.00	<i>Morning tea</i>
11.00-12.30	Text analysis in R – 3 (topic models)
12.30-1.30	<i>Lunch</i>
1.30-3.00	Gephi for network visualisation - 2
3.00-3.30	<i>Afternoon tea</i>
3.30-5.00	Individual assistance/Working on class projects

Day 5 (Fri 8th Feb)

9.00-10.30	Dynamic network analysis in R - 2
10.30-11.00	<i>Morning tea</i>
11.00-12.30	Writing with data: Producing reports in R using knitr Advanced topics
12.30-1.30	<i>Lunch</i>
1.30-3.00	Working on class projects and wrap up
3.00-3.30	<i>Course finishes</i>

