Virtual Observatory for the Study of Online Neworks (VOSON) Lab – brief introduction
• VOSON Lab at the ANU (http://vosonlab.net): Teaching, research and tool development in areas of web (social) science, network science, computational social science, big data analytics...
  – Formally commenced in 2005

• New research via Australian Research Council grants:
  – SR0567298 "Virtual Observatory for the Study of Online Networks (VOSON)" - Ackland, Gibson, O'Neil, Buchhorn, Bimber, Bimber, Ward – 2005
  – LP0990974 "The role of online social networks in successful ageing: benefitting from 'who you know' at older ages" - Booth, Ackland, Windsor – 2009-2012
  – DP140103688 “Understanding online attention and user-generated content creation: An information consumption and production perspective” - Ackland – 2014-2016
• Research tools
  
  – **VOSON software** for hyperlink network construction & analysis (publicly available since 2006, over 2000 user accounts issued)
    - Now available commercially via Uberlink (http://www.uberlink.com)
  
  – **R packages:**
    - **SocialMediaLab** (with Tim Graham) – released on CRAN Nov 2015
      - collects (via free APIs) data from: Twitter, YouTube, Facebook, Instagram
      - creates various networks (actor networks, semantic networks) and datasets for text analysis
    
    – **Adaptive Sampling** (with Kyosuke Tanaka)
  
  – **Australian Seniors' Online Networks (AuSON) Facebook App**
    - Collects Facebook friendship data (ties and attributes) of participants, social capital and personal attributes also collected via online survey
    - Mahin Raissi’s PhD project at ANU
VOSON+NodeXL allows construction and import of hyperlink networks from within NodeXL [to be decommissioned later this year...]
Number of VOSON accounts issued - cumulative total

Number of new VOSON accounts per month
• Teaching & training
  – Social Science of the Internet specialisation in the ANU's Master of Social Research, established in 2008
  – Master of Digital Social Science from 2017
  – PhD supervision
  – ACSPRI courses
    • Big Data Analysis for Social Scientists (R-based course including SocialMediaLab)
    • Social Media Analysis (VOSON, NodeXL, Gephi)
Part I – Web Social Science Methods
- Ch 1 – Introduction - Web Primer and Perspectives
- Ch 2 – Online Research Methods
- Ch 3 – Social Media Networks
- Ch 4 – Hyperlink Networks

Part II – Web Social Science Examples
- Ch 5 – Friendship Formation and Social Influence
- Ch 6 – Organisational Collective Behaviour
- Ch 7 – Politics and Participation
- Ch 8 – Government and Public Policy
- Ch 9 – Production and Collaboration
- Ch 10 – Commerce and Marketing
SocialMediaLab R Package
SocialMediaLab R Package

• Aims to be the “Swiss army knife” for collecting social media data via free APIs and constructing datasets for network and text analysis

• Current data sources:
  - Twitter
  - Facebook
  - YouTube
  - Instagram
  - [...interested in a new data source? Consider contributing to SML!]

• Released on CRAN November 2015 – current version is 0.22.0
Who has contributed to SocialMediaLab?

- **Tim Graham** (Sociology, Univ. of Queensland - soon to be at ANU, @TimothyJGraham) – Lead developer and maintainer

- **Rob Ackland** (ANU, @RobAckland)

- **Chung-hong Chan** (Journalism and Media Studies Centre, Univ. of Hong Kong, @chainsawriot) – implementation of new UI using maggritr
• More information
  – CRAN page (https://cran.r-project.org/web/packages/SocialMediaLab/index.html)
  – VOSON page (http://vosonlab.net/SocialMediaLab)
  – GitHub page (https://github.com/vosonlab/SocialMediaLab)
<table>
<thead>
<tr>
<th><strong>VOSON SocialMediaLab – Data Typology (5th April 2016, version 0.20.1)</strong></th>
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<td><strong>Facebook</strong></td>
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<td><strong>Data collection</strong></td>
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<td><strong>Actor(s)</strong></td>
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