

# Virtual Data Intensive Summer School

## July 8-10, 2013

### Agenda

The Virtual Data Intensive Summer School will be held 8:00-2:00 PDT (11:00-5:00 EDT) on July 8 through July 10. To accommodate participants from different time zones, a short lunch break will be held at roughly 11:00-11:30 PDT (2:00-2:30 EDT) each day. All times below are given in Pacific Daylight Time and are subject to minor changes.

### Monday, July 8

- 8:00-9:00 Robert Sinkovits, San Diego Supercomputer Center  
Introduction to summer school and basics of data intensive computing
- 9:00-10:00 Steve Tuecke, University of Chicago  
Globus Online for Research Data Management
- 10:00-10:15 Break
- 10:15-11:15 Yoav Freund, University of California, San Diego  
MapReduce, Hadoop and Spark
- 11:15-11:45 Lunch
- 11:45-2:00 Richard Marciano, University of North Carolina  
Jeff Heard, Renaissance Computing Institute (RENCI)  
Data management

### Tuesday, July 9

- 8:00-11:00 Chris Fariss, University of California, San Diego  
Introduction to R and statistical analysis of data using R  
(break at approximately 9:30)
- 11:00-11:30 Lunch
- 11:30-12:00 Chris Fariss, University of California, San Diego  
Statistical analysis of data using R (continued)
- 12:00-2:00 Charles Elkan, University of California, San Diego  
The landscape of analytics: a personal view

### Wednesday, July 10

- 8:00-11:00 Amy Szcepaniski, University of Tennessee, Knoxville  
Introduction to Visualization with R  
(break at approximately 9:30)
- 11:00-11:30 Lunch
- 12:00-2:00 Dean Abbott, Abbott Analytics Inc.  
Text mining

## Preparing for the virtual summer school

Several of the instructors have requested that you preinstall software on your laptop. Given the large number of participants and the compressed schedule, we ask that you comply and do this before the start of the summer school.

- R, version 3.0.1 (Good Sport) or later <http://www.r-project.org/>
- R packages: ggplot2 (version 0.9.3 or later), scales, ggmap, googleVis, and igraph
- Download uber cars data set from <http://www.infochimps.com/datasets/uber-anonymized-gps-logs>
- KNIME: <http://www.knime.org/>
- Google Chrome browser: <https://www.google.com/intl/en/chrome/browser/>

Prior knowledge of R is not required, but we do assume that you have some programming experience and familiarity with basic programming concepts (variables, arrays, loops, branching, etc.). You may find it helpful to acquaint yourself with basic R syntax ahead of time. Reading the first two chapters of the following online introduction is recommended <http://cran.r-project.org/doc/manuals/R-intro.html>

Prior knowledge of KNIME is not necessary, but you may find it helpful to familiarize yourself with the software. The KNIMEtech website contains very useful introductory material that will help you get started.

<http://tech.knime.org/knime>

<http://tech.knime.org/installation-0>

<http://tech.knime.org/getting-started>

<http://tech.knime.org/screencasts>

<http://tech.knime.org/workbench>