UW Data Science Poster and Networking Session
February 10, 2016  3:00-5:00pm
Welcome to the UW Data Science Poster and Networking Session!

This two-hour event is an opportunity for the University of Washington campus community and regional partners to present their activities and connect with others engaged in data-intensive discovery.

Rapid advances in technology are transforming nearly every field from “data-poor” to “data-rich.” The ability to extract knowledge from this abundance of data is the cornerstone of 21st century discovery. At the University of Washington eScience Institute, our mission is to engage researchers across disciplines in developing and applying advanced computational methods and tools to real world problems in data-intensive discovery.

Visit us at: http://escience.washington.edu/
CONTRIBUTED POSTERS

1. Expensive Ride Analysis for King County Metro Paratransit  
   presenter: Rohan Aras  
   Data Science for Social Good  rohana@uw.edu

2. Cloud-based computational tools for earth science applications  
   presenter: Anthony Arendt  
   Applied Physics Lab  arendta@uw.edu

3. Visualizing Behavioral Patterns at Multiple Timescales with Storylines  
   presenter: Dustin Arendt  
   Pacific Northwest National Laboratory  dustin.arendt@pnnl.gov

4. Simulations of SNIa in large sky surveys like LSST  
   presenter: Rahul Biswas  
   Astronomy/EScience  rbiswas4@gmail.com

5. Classification and Recognition of Fixed Point Networks  
   presenter: David Blaszka  
   Applied Mathematics  djblazz@gmail.com

6. Predicting Poverty and Wealth from Mobile Phone Metadata  
   presenter: Joshua Blumenstock  
   Information School  joshblum@uw.edu

7. Where the sidewalk ends  
   presenter: Nick Bolten  
   Electrical Engineering  nbolten@gmail.com

8. A Robust Approach to Topic Model Interpretation  
   presenter: Andreu Casas  
   Political Science  acasas2@uw.edu

9. Multi-baryon systems and nuclear forces  
   presenter: Emmanuel Chang  
   INT, Physics, UW  changezy@uw.edu

10. Building visual analytics tools for enabling human-centered data science  
    presenter: Nan-Chen Chen  
    Human-Centered Design & Engineering  nanchen@uw.edu

11. Abstraction networks for anatomical knowledge: A method to facilitate authoring, auditing, and querying the Foundational Model of Anatomy ontology  
    presenter: Melissa Clarkson  
    Biological Structure  mclarkso@uw.edu

12. Mining oceanographic big data: a case study in phytoplankton ecology  
    presenter: Sophie Clayton  
    School of Oceanography and eScience Institute  sclayton@uw.edu
13. Advancing the biological realism of individual-based spatial simulations for applications to population genetics, conservation biology, and evolutionary ecology.

**Presenter:** Jennifer Day
**Biology** jmw31@uw.edu

14. Distinguishing RNA-seq laboratories based on experimental bias in RNA-seq data

**Presenter:** Katie Doroschak
**Computer science** kedorosch@uw.edu

15. Imputing Missing Data In the ENCODE and Roadmap Epigenomics Projects

**Presenter:** Timothy Durham
**Genome Sciences** tdurham@uw.edu

16. Notes from the Cloud: Surviving the Data Deluge

**Presenter:** Rob Fatland
**IT** rob5@uw.edu

17. Geotagged Social Media Reveals Environmental Drivers of Tourism Patterns on Jeju Island, South Korea

**Presenter:** David Fisher
**Natural Capital Project - College of the Environment** davemfish@gmail.com

18. Killer Asteroids!

**Presenter:** Jes Ford
**eScience Institute & Astronomy** jesford@uw.edu

19. Streaming variational inference for Bayesian nonparametric mixture models

**Presenter:** Nick Foti
**Statistics** nfoti@uw.edu

20. It's big data for political science anyway: The .GOV Internet Archive Repository

**Presenter:** Emily Gade
**Political Science** ekgade@uw.edu

21. Using Yelp Reviews to Characterize Trends in Foodservice Reviews and Reports of Foodborne Illness in the US

**Presenter:** Leah Greenbaum
**Evans School of Public Policy and Governance** lgreenb@uw.edu

22. Construction of a voxel-based mesoscopic mouse connectome

**Presenter:** Kameron Harris
**Applied Math** kamdh@uw.edu

23. SciSheets - reinventing spreadsheets for scientists

**Presenter:** Joseph Hellerstein
**EScience** joseph.hellerstein@gmail.com

24. Analysis in Motion Infrastructure

**Presenter:** Nathan Hilliard
**Pacific Northwest National Laboratory** nathan.hilliard@pnnl.gov

25. REDPy: Scaling a Repeating Earthquake Detector for Use in Near Real-Time on Pacific Northwest Volcanoes

**Presenter:** Alicia Hotovec-Ellis
**Earth and Space Sciences** ahotovec@uw.edu
26. GUIDdock - Docker containers with a common graphics interface to address the reproducibility of bioinformatics analyses
   presenter: Ling-Hong Hung
   Institute of Technology  lhhung@uw.edu

27. What Your Username Says About You
   presenter: Aaron Jaech
   EE  ajaech@uw.edu

28. Predicting Adoption of Mobile Money
   presenter: Muhammad Khan
   Information School  razz@uw.edu

29. Toward Individualized Therapy: Correlation of Mutation Analysis with in vitro High Throughput Drug Sensitivity Testing in New Diagnosis and Relapsed Acute Myeloid Leukemia
   presenter: Sina Khankhej
   Institute of Technology, Tacoma  sinak@uw.edu

30. Predicting Discontinuation of Docetaxel Treatment for Metastatic Castration-Resistant Prostate Cancer (mCRPC) with Hill-Climbing and Random Forest
   presenter: Daniel Kristiyanto
   University of Washington Tacoma  danielkr@uw.edu

31. Machine Learning for Flood Prediction in Google Earth Engine
   presenter: Catherine Kuh
   School of Environmental and Forest Sciences  ckuhn@uw.edu

32. Learning the Underlying Social Network from Continuous-Time Pairwise Interaction Data
   presenter: Wesley Lee
   Statistics  wrlee@uw.edu

33. Probabilistic Cause-of-death Assignment using Verbal Autopsies
   presenter: Zehang Li
   Statistics  lizejang@uw.edu

34. Managing Mixed-Mode Survey Projects in REDCap
   presenter: Paul Litwin
   Fred Hutch  plitwin@fredhutch.org

35. Finite Population Inference for Causal Parameters
   presenter: Wen Wei Loh
   Statistics  wloh@uw.edu

36. Inferring Connectivity in Networked Dynamical Systems: Challenges Using Granger Causality
   presenter: Bethany Lusch
   Applied Mathematics  herwaldt@uw.edu

37. Daily bias correction for hydrologic modeling
   presenter: Guillaume Mauger
   Climate Impacts Group  gmauger@uw.edu

38. Light Curve Analysis of Type 1a Supernovae
   presenter: Lisa McBride
   Physics & Astronomy  lisaleemcb@gmail.com
39. Mmani: Scalable Manifold Learning  
**presenter:** James McQueen  
Statistics  jmcq@uw.edu

40. Systematic Detection of Earthquakes at Mount St. Helens  
**presenter:** Xiaofeng Meng  
ESS/eScience Institute  xmeng@uw.edu

41. Simulation-Based Hypothesis Testing of Socio-Technical Community Resilience Using Distributed Optimization and Natural Language Processing  
**presenter:** Scott Miles  
Human Centered Design and Engineering  milessb@uw.edu

42. Secure Machine Learning  
**presenter:** Stacey Newman  
Center for Data Science  newmsc8@uw.edu

43. Translating and Synthesizing Modeling Data in Design Teams  
**presenter:** Laura Osburn  
Communication  lbusch@uw.edu

44. Visualizing Scholarly Influence Over Time  
**presenter:** Jason Portenoy  
Information School  jporteno@uw.edu

45. Trial-to-trial, uncertainty-based adjustment of decision boundaries in visual categorization  
**presenter:** Eugenia Prezhdo  
Applied Math  eugenia.prezhdo@gmail.com

46. School Violence, Public Health and DataQuesting  
**presenter:** Paul Privateer  
National School Violence Prevention Initiative  paulprivateer@nsspo.org

47. Predictors of permanent housing from HMIS data  
**presenter:** Ariel Rokem  
eScience Institute  arokem@gmail.com

48. Rainfall and the Smart City: developments in measurement and prediction at the City of Seattle  
**presenter:** James Rufo-Hill  
City of Seattle  james.rufohill@seattle.gov

49. Automatically Improving Floating Point Accuracy with Herbie  
**presenter:** Alex Sanchez-Stern  
Computer Science  asanchstr@cs.washington.edu

50. Intelligent and Collaborative Question Answering  
**presenter:** Huan Sun  
CSE  huansun@cs.washington.edu

**presenter:** Travis Thonstad  
Civil and Environmental Engineering  thonstat@uw.edu
<table>
<thead>
<tr>
<th>52. Social Segregation: How Much Do Neighborhoods Matter?</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Ott Toomet</td>
</tr>
<tr>
<td>iSchool  <a href="mailto:otoomet@gmail.com">otoomet@gmail.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>53. Periodograms for Multiband Astronomical Timeseries</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Jake VanderPlas</td>
</tr>
<tr>
<td>eScience  <a href="mailto:jakevdp@uw.edu">jakevdp@uw.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>54. A class of network models recoverable by spectral clustering</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Yali Wan</td>
</tr>
<tr>
<td>Department of Statistics  <a href="mailto:yaliwan@uw.edu">yaliwan@uw.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>55. A Novel Model for Binary Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Linbo Wang</td>
</tr>
<tr>
<td>Biostatistics  <a href="mailto:lbwang@uw.edu">lbwang@uw.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>56. Efficient Computation for Modeling Mixed Membership Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Y. Samuel Wang</td>
</tr>
<tr>
<td>Statistics  <a href="mailto:ysamwang@uw.edu">ysamwang@uw.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>57. Multimodal Neural Decoding with Natural Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Nancy Wang</td>
</tr>
<tr>
<td>Computer science and engineering  <a href="mailto:wangnxr@cs.washington.edu">wangnxr@cs.washington.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>58. Quakes and whales: delivering wired undersea volcano data to scientists and the public</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Michelle Weirathmueller</td>
</tr>
<tr>
<td>Oceanography  <a href="mailto:michw@uw.edu">michw@uw.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>59. Legislative Explorer: Data-driven Discovery of Lawmaking</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: John Wilkerson</td>
</tr>
<tr>
<td>Political Science  <a href="mailto:jwiker@uw.edu">jwiker@uw.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>60. Studying International Migration with Social Media Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Emilio Zagheni</td>
</tr>
<tr>
<td>Sociology  <a href="mailto:emilioz@uw.edu">emilioz@uw.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>61. Analysis in Motion Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Dimitri Zarzhitsky</td>
</tr>
<tr>
<td>N/A  <a href="mailto:dimitri.zarzhitsky@pnnl.gov">dimitri.zarzhitsky@pnnl.gov</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>62. Classifying Rumor Stance in Crisis-Related Social Media Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>presenter: Li Zeng</td>
</tr>
<tr>
<td>Information School  <a href="mailto:lizeng@uw.edu">lizeng@uw.edu</a></td>
</tr>
</tbody>
</table>