



**Data Science (Big Data) Exploratory Workshop
August 21- August 22, 2014**

Participant List

Mark Birkin

Professor, Spatial Analysis and Policy

*Director, GeoSpatial Data Analysis and Simulation Node, ESRC National Centre for Research Methods
University of Leeds*

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Areas of Interest: Professor Birkin's major interests are in simulating social and demographic change within cities and regions, and in understanding the impact of these changes on the need for services like housing, roads and hospitals, using techniques of microsimulation, agent-based modelling and GIS. He also serves as Director of the GeoSpatial Data Analysis and Simulation node of the ESRC National Centre for Research Methods.

Nora Dimmock

Director, Digital Humanities Center

Librarian, Film & Media Studies

University of Rochester

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Areas of Interest: Nora Dimmock is interested in digital technology and the role of technology in teaching and learning. She helped to transform and facilitate digital access to library materials, provide support for web-based initiatives, and promote digital humanities. She also facilitated in creating the new Digital Media Studies program.

Chen Ding

Professor, Department of Computer Science

University of Rochester

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Areas of Interest: Chen Ding's research seeks to understand the composite and emergent behavior in computer systems especially its dynamic parallelism and active data usage and develop software techniques for locality optimization, data management, and recently suggestion-based program parallelization and optimization.

Chris Evelo

Head & Professor, Department of Bioinformatics

Maastricht University

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Areas of Interest: Dr. Evelo's main research focuses on integrative systems biology where he uses modern bioinformatics approaches to understand different types of genomics, metabolomics and large scale genetics data.



Kathleen Fear

Data Librarian, River Campus Libraries

University of Rochester

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Areas of Interest: Dr. Kathleen Fear is interested in helping students and researchers manage, archive and share data.

Jane Gatewood

Associate Provost, Global Engagement

University of Rochester

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Areas of Interest: Dr. Gatewood is focused on coordinating a range of international initiatives to further develop global educational and research networks.

Amadou Gaye

Research Associate, School of Social and Community Medicine

University of Bristol

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Areas of Interest: Dr. Amadou Gaye is currently coordinating the technical development of Horizontal DataSHEILD. Part of his work consists of identifying statistical analyses that might be relevant for biobanks and cohorts and writing R libraries that enable such analysis. He is also currently working on consolidating and expanding the ESPRESSO software and processing genotype-phenotype applications for the 1958 birth cohort data and developing genotype/phenotype linked datasets to be release as teaching datasets.

Chuck Humphrey

Data Library Coordinator, University of Alberta

Academic Director, Research Data Centre

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Areas of Interest: Chuck Humphrey is committed to preserving research data in Canada. He has been an active contributor to several studies and consultations on research data and is currently working on a collaboration between Scholars Portal and the University of Alberta Libraries aimed at long-term sustainable preservation of the research data from the Canadian International Polar Year and of data from the future research in the Canadian Artic.

Henry Kautz

Professor, Department of Computer Science

Director, Institute for Data Science

University of Rochester

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Areas of Interest: Professor Henry Kautz performs research in social media and public health, grounded natural language learning, pervasive computing, search algorithms, and assistive technology.



Steffen Klaere

Lecturer, Department of Statistics
University of Auckland, New Zealand
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Areas of Interest: Professor Klaere's research interests are in phylogenetic inference, population genetics, and data analysis.

David Krusch

Director, Department of Medical Informatics
Professor, Department of Surgery, Oncology
Chief Medical Information Officer, UR Medicine
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Areas of Interest: Dr. David Krusch's areas of specialty include gastrointestinal surgery, minimally invasive upper abdominal surgery, vascular access and surgical treatment of hematological diseases. He is also very interested in educational programs, technologies and methods impacting the role of medical informatics in health care.

Peter Lennie

Provost
Professor, Brain and Cognitive Sciences & Center for Visual Science
University of Rochester
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Areas of Interest: Provost Lennie's research is aimed at understanding how we see. His work sits at the interface between visual perception and visual physiology, motivated by the idea that visual perception can be explained in terms of underlying neural mechanisms. Provost Lennie also serves on the WUN Academic Advisory Steering Group, which provides oversight of the policies of the network's academic portfolio.

Paul Lu

Associate Professor, Department of Computing Science
University of Alberta
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Areas of Interest: Professor Lu is interested in all aspects of high-performance computing, especially parallel and distributed systems. His research centers on systems software and software infrastructure for wide-area overlay metacomputing. Lu is the primary investigator of the Trellis Project which involves investigating techniques to create a single metacomputer from a collection of high-performance systems.

Jiebo Luo

Professor, Department of Computer Science
University of Rochester
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Areas of Interest: Professor Luo's research spans image processing, computer vision, machine learning, data mining, medical imaging, and ubiquitous computing. He has been an advocate for contextual inference in semantic understanding of visual data, and continues to push the frontiers in this area by incorporating geo-location context and social context.



Alex Markham

*Director of Research and Professor of Medicine, Institute of Biomedical & Clinical Sciences
University of Leeds*

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Areas of Interest: Professor Sir Alex Markham's research interests are in molecular biology and genetics, the molecular basis of cancer and in aspects of translational research in the broadest sense. He is currently leading the MRC Medical Bioinformatics Centre.

Mary Ann Mavrinac

*Vice Provost & Dean, River Campus Libraries
University of Rochester*

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Areas of Interest: Dean Mavrinac is interested in the development of critical new digital services, creating inspiring learning spaces, and for thinking strategically about the rapidly evolving field of information science.

Brendan Mort

*Director, Center for Integrated Research and Computing
Assistant Professor, Department of Chemistry
University of Rochester*

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Areas of Interest: Dr. Brendan Mort's interests are in high performance computing and supporting researchers access to and use of computing resources. Additional interests include application of computing technology to chemistry and biology, computational chemistry algorithm development, molecular dynamics simulations, electronic structure theory.

Reza Nejabati

*Senior Lecturer, Department of Electrical & Electronic Engineering
University of Bristol*

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Areas of Interest: Dr. Reza Nejabati's current area of research is in the field of disruptive new internet technologies with a focus on application of high-speed network technologies, design and control issues for software defined, service-oriented and programmable network, cross layer network design and architecture as well as network architecture and technologies for e-science and cloud computing.

Simon Price

*Academic Research IT Manager
University of Bristol*

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Areas of Interest: Simon Price has a research background in e-Science and e-Research with a particular interest in their intersection with machine learning and logic programming. As the Academic Research IT Manager, he partners with academic researchers, IT Services, Research Data Service, Advanced Computing and other professional service providers at the University.



Peter Quinn

*Professor & Director, International Centre for Radio Astronomy Research
The University of Western Australia*

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Areas of Interest: Professor Quinn's research focuses on the formation and evolution of galaxies using supercomputer computations and simulations. In particular, he is working on the nature of Dark Matter, the formation and evolution of Dark Matter around galaxies and its influence on the galaxy formation process. He is also interested in challenges associated with large-scale data and computationally intensive science, in particular the concept of a Virtual Observatory and research using large digital astronomical archives.

Evgueni Smirnov

*Assistant Professor, Computer Science
Department of Knowledge Engineering
Faculty of Humanities and Science
Maastricht University*

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Areas of Interest: Professor Evgueni Smirnov's areas of interest include machine learning, particularly, version spaces, reliable classification, and Meta learning. He is also interested in data mining, inductive databases, text mining, and e-democracy.

Scott Steele

*Director (Operations), NYS Center of Excellence for Data Science
Director, Government and Academic Research Alliances
Associate Professor, Public Health Sciences
University of Rochester*

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Areas of Interest: Dr. Steele's research interests are in the field of science and technology policy. He coordinates and supports research and educational programs focused on Data Science across the University and facilitates external Partnerships. He also serves as the WUN Coordinator where he liaises with the WUN universities and with University of Rochester researchers to facilitate collaborations.

Russ Taylor

*Professor, Department Astronomy
University of Cape Town*

Areas of Interest: Professor Taylor has a research interest in radio astronomy, in particular wide-field polarization, cosmic magnetism and Big Data, and has played a prominent role in the SKA project since its inception. His research plan is to use MeerKAT and KAT-7 to measure the polarization of radio waves and to trace the properties of magnetic fields in galaxies and intergalactic space, which will give scientists a better understanding of the evolution of cosmic magnetism.

Ramine Tinati

*Faculty, Electronics and Computer Science
Research Staff, Web & Internet Science
University of Southampton*

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Areas of Interest: Dr. Tinati's research interests are in big data, collective intelligence, cscw, data analytics, human-computer interaction, linked data, network science, participatory design, pro-human



web development, semantic web, social computing, user participation, web 2.0, web 3.0, web science and wisdom of the crowd.

Farida Vis

Faculty Research Fellow

The University of Sheffield

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Areas of Interest: Dr. Vis' research is centrally concerned with researching social media, crisis communication, data journalism, citizen engagement and discourses around Big Data. She is currently leading two projects in the area of open data, citizen engagement and a renewed interest in growing your own food: Everyday Growing Cultures (part of the EPSRC's Communities and Cultures Network+) and The Cultural Values of Digging (part of the AHRC's Cultural Value project).

Dan Watson

Chair & Professor, Department of Physics and Astronomy

University of Rochester

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Areas of Interest: Professor Watson's research has included work on star and planetary-system formation, the structure and evolution of spiral galaxies, the nature and formation of active galactic nuclei, and the development of instruments and infrared detector arrays for astronomy.

Osmar Zaïane

Professor, Department of Computing Science, University of Alberta

Scientific Director, Alberta Innovates Centre for Machine Learning (AICML)

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Areas of Interest: Professor Zaïane's research interests are in data analytics, namely novel data mining algorithms, web mining, text mining, image mining, social network analysis, data visualization and information retrieval with applications in Health Informatics, e-Learning and e-Business.

Martin Zand

Professor, Department of Medicine, Nephrology

Director, Rochester Center for Health Informatics

Co-Director, Center for Biodefense Immune Modeling

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Areas of Interest: Dr. Zand and his laboratory focuses on studying B cell activation and differentiation using cell culture, animal models, and translational studies of human immune responses to vaccination in normal subjects and immune suppressed transplant recipients. He is also establishing the new Rochester Center for Health Informatics, as a "learning healthcare system", which will use healthcare data and cutting-edge analytics to iteratively improve healthcare through the distillation of massive amounts of healthcare data into actionable findings.

Jianhui Zhong

Professor, Institute of Neuroscience

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Areas of Interest: Professor Zhong studies complex relaxation and diffusion effects and interactions of magnetic susceptibility and diffusion in tissues, application of diffusion in brain electrical activities and



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functions, and he is one of the inventors for multiple quantum coherence brain imaging. In recent years, his research focuses on brain diffusion tensor imaging, quantitative analysis of brain functional imaging and network analysis, fast MR imaging techniques, and their applications of MRI and fMRI in neuroscience, translational medicine and individual imaging analysis.