

## Scientific committees

<a href="#">NetMob 2015</a>	Massachusetts Institute of Technology (MIT), Boston, US
<a href="#">NetMob 2013</a>	Massachusetts Institute of Technology (MIT), Boston, US
<a href="#">KDD 2014</a>	New York, USA
<a href="#">ICDM 2014</a>	Shenzhen, China
<a href="#">CARMA 2016</a>	Valencia, Spain

## Talks - International Research Conferences

1. [Using Mobile Phone Data for Poverty Estimates in Bangladesh](#)  
Invited Speaker - United Nations Big Data for Official Statistics, Abu Dhabi (2015)
2. [Deep Learning Applied to Mobile Phone Data for individual Income classification](#)  
International Conference of Artificial Intelligence, Bangkok (2016)
3. [Accelerating Internet Growth in Asia using Viral Spreading](#) [Infographics]  
Massachusetts Institute of Technology (MIT), Boston, US (Netmob,2013)
4. [Predicting Gender from Mobile Phone Metadata](#)  
Massachusetts Institute of Technology (MIT), Boston, US (Netmob,2015)
5. [Investigating Social Influence through large-scale field experimentation](#)  
Massachusetts Institute of Technology (MIT), Boston, US (Netmob,2015)
6. [Dynamics of Social and Spatial Segregation using mobile phone data](#)  
Massachusetts Institute of Technology (MIT), Boston, US (Netmob,2015)
7. [Clustering of Smartphone ownership in Development Countries](#)  
Massachusetts Institute of Technology (MIT), Boston, US (Netmob,2013)
8. **Apple VS Android: A comparison of Social Effects in Adoption**  
Massachusetts Institute of Technology (MIT), Boston, US (WIDS,2012)
9. [Comparing and visualizing the social spreading of products on a large-scale social Network](#) [presentation]  
Massachusetts Institute of Technology (MIT), Boston, US (WIDS ,2011)
10. [A cross country study of gender prediction using mobile phone metadata](#)  
NetSci-X, Brasil (2015)
11. [Smartphone application co-usage: Could we predict your next app?](#)  
NetSci-X, Brasil (2015)
12. Big Data: Rewards and Risks for the Social Sciences  
Oxford Internet Institute, University of Oxford, UK (2013)
13. [Big Data And Social change in Underdeveloped Countries](#)  
Rockefeller Centre, Bellagio, Italy (2014)
14. [Big Data-Driven Marketing: How Machine Learning outperforms marketers gut-feeling](#) [presentation]  
2014 Social Computing, Behavioral-Cultural Modeling and Prediction, Washington, USA
15. [Testing contagion in small groups via Direct Marketing](#)  
Stern School of Business, New York(2013)
16. Social Influence and Complex Contagion  
Workshop on information in Networks, Stern School of Business, New York (2015)

17. [Apple VS Android: Signals of success in the Social Network](#)  
ECCS 2013 International conference on Complex Systems , Quantifying Success satellite session  
World Trade Center, Barcelona, Spain (2013)
18. The activation of social networks in the wake of the Oslo 22 July Bombing  
INSNA Social Network Analysis Conference  
Sunbelt XXXII, Redondo, California, US (2012)
19. The size of mobile phone based core social networks in South Asia and Scandinavia  
INSNA Social Network Analysis Conference, Sunbelt XXXII, Redondo, California, US (2012)
20. Product Spreading and Network Structure for an inter firm communication network  
INSNA Social Network Analysis Conference, Sunbelt XXIX, San Diego, US, (2009)
21. Social Network Monsters in Telecom Call Graphs  
INSNA Social Network Analysis Conference  
Sunbelt XXX, Riva Del Garda, Italy (2010)
22. Telecom Service Diffusion and Influence in a network of interlocking directorates  
INSNA Social Network Analysis Conference  
Sunbelt XXX, Riva del Garda, Italy (2010)
23. Product Adoption, Network Structure and Growth in a Large Mobile Phone Network  
ASONAM 2010, Advances in Social Network Mining and Analysis, Odense, Denmark (2010)

## List of research publications

### 1. Can mobile usage predict illiteracy in a developing country?

In review for European Conference on Machine Learning and Principles and Practice of Knowledge Discovery (EMCL-PKDD 2016)

### 2. [Deep learning applied to mobile phone data for Individual income classification](#)

Joint work with J. Bjelland, BA Reme, A. Iqbal, E.Jahani

Published in International conference on Artificial Intelligence: Technologies and Applications (ICAITA 2016)

### 3. Mapping Poverty using mobile phone and satellite data

Joint work with J.Steele, Linus Bengtsson, A.Tatem, C.Pezzulo, YA Montjoye, Kenth Engø-Monsen, J.Bjelland, X Lu, E Wetter, J.Blumenstock, A.Iqbal, N.Hadiuzzaman

In review for PNAS (2016)

### 4. [The activation of core social networks in the wake of the 22 July Oslo bombing](#)

Joint work with R.Ling, KE Monsen, J.Bjelland, G.Canright

Published in IEEE Advances in Social Network Analysis and Mining, 586-590, 2012

### 5. Detecting climate adaptation with mobile network data: Anomalies in communication, mobility and consumption patterns during Cyclone Mahasen

Joint work with Xin Lu, David J.Wrathall, Md Nadiruzzaman, E.Wetter, A.Iqbal, T.Qureshi, A.Tatem, G.Canright, K E-Monsen, L.Bengtsson

In review, Climate Change (2016)

### 6. [Comparing and visualizing the social spreading of products on a large-scale social network](#)

Joint work with J. Bjelland, KE Monsen, G. Canright, R. Ling

Published in The influence on Technology on Social Network Analysis and Mining, Tanel Ozyer et.al, Volume 6, 2013, pp 201-225 (Springer)

### 7. [Big Data-Driven Marketing: How Machine Learning outperforms marketers' gut-feeling \(poster\)](#)

Joint work with J. Bjelland, A.Iqbal, A. Pentland, YA Montjoye

Published in Social Computing, Behavioral-Cultural Modeling, & Prediction, Washington, USA (2014), LNCS Vol. 8393 (Springer)

### 8. [Impact of human mobility on the emergence of dengue epidemics in Pakistan](#)

Joint work with A. Wesolowski, T. Qureshi M. Bonid, M.Johansson, S.Rasheed, KE Monsen, C. Buckee  
Published in PNAS (2015)

## **9. A framework for prediction tasks on mobile phone metadata**

Joint work with E.Jahani, L.Bengtsson, J.Bjelland, A.Pentland, YA Montjoye  
In Submission to Knowledge Discovery & Data Mining (KDD 2016)

## **10. [Unveiling Hidden Migration and Mobility Patterns in Climate Stressed Regions: A Longitudinal Study of Six Million Anonymous Mobile Phone Users in Bangladesh](#)**

Joint work with X. Lu, D. Wrathall, Nadiruzzaman, E. Wetter, Asif Iqbal, T. Qureshi, A. Tatem, G. Canright, KE Monsen, L.Bengtsson  
Published in Global Environmental Change 38 (2016 1-7)

## **11. [Small and Even Smaller Circles: The Size of Mobile Phone-Based Core Social Networks in Scandinavia and South Asia](#)**

Joint work with R. Ling, G. Canright, J. Bjelland, KE Monsen  
Published in Journal of Intercultural Communication Research: Volume 41, Issue 3, 2012

## **12. Joy of Giving : Increasing Product Uptake by allowing customers to Forward**

Joint work with J.Bjelland, G.Canright, A.Iqbal, G.Grønnetvet, M.Norton, B.Reme  
In preparation (2016)

## **13. [Handset-centric view of smartphone application use](#)**

Joint work with J.Rana, J.Bjelland, T.Couronne, .Wagner, A.Rice  
Published in Procedia Computer Science, Volume 34, 2014, Pages 368–375

## **14. [Small circles: Mobile Telephony and the cultivation of the private](#)**

Joint work with R. Ling, J. Bjelland S. Campbell  
Published in The Information Society: An International Journal, Volume 30, Issue 4, 2014

## **15. [The socio-demographics of texting: An analysis of traffic data](#)**

Joint work with R.Ling, T.Bertel  
Published in New Media & Society, Vol 14 Issue 2 March 2012 pp 280-297

## **16. [Product adoption networks and their growth in a large mobile phone network](#)**

Joint work with J. Bjelland, G. Canright, KE Monsen, R Ling  
Published in IEEE Advances in Social Network analysis and Mining, 208-216, 2010

## **17. [A Social Network Study of Android VS Apple Smartphone battle](#)**

Joint work with J.Bjelland, R.Ling, KE Monsen, G.Canright  
Published in IEEE Business Applications of Social Network Analysis, 983-987, 2012

## **18. Using Deep Learning to predict demographics from mobile phone metadata**

Joint work with B.Felbo, S. Lehmann, YA montjoye, A.Pentland  
In Submission to Knowledge Discovery and Data Mining (KDD) 2016

## **19. Investigating Social Influence through large-scale field Experimentation (work title)**

Joint work with David Lazer, Taimur Qureshi, Geoffrey Canright, J.Bjelland, Chris Riedl  
In preparation (2016)

## **20. Quantifying socio-economic segregation across continents using mobile phone metadata**

Joint work with Jo Thori Lind, Andreas Kotsadam, Bjørn-Atle Reme and Johannes Bjelland  
In preparation (2016)

## **21. The impact of social networks on individual income (work title)**

Joint work with Guillaume Saint-Jacques, Eaman Jahani, Johannes Bjelland, Bjørn-Atle Reme  
In preparation (2016)

## Media exposure

1. [How Big Cities Can Lead to Small Thoughts](#)  
Wall Street Journal (Mar 2012)
2. [Report to President Obama: Big Data and Privacy: a technological perspective](#)  
Executive Office of the President,  
White House, May 2014
3. [How friends influence gadget adoption](#)  
MiT Technology Review (Jun 2011)
4. [Wireless companies could use your friends](#)  
MiT Technology Review (Jul 2010)
5. [How Big Data can serve development](#)  
Gates Foundation, 2014 (Nirant Gupta, Jake Kendall)
6. [Cell phone data analysis dials in crime networks](#)  
Science News (Mar 2013)
7. [Apple product fever](#)  
Science News (Jun 2011)
8. [Big Data Analytics in Telenor Group](#)  
Article in Norwegian Marketing Association
9. [How friends influence gadget adoption](#)  
Times of India (Jun 2011)
10. [Bringing together the brightest minds in Big Data](#)  
Telenor Group (May 2013)
11. [Big Data - Good for the World, good for Business](#)  
VG Nett, E24 news (May 2013)
12. [May 17th in 25 seconds](#)  
The technology that visualize our National Day will also save people from flood and Dengue Fever  
Dagens Næringsliv (May 2014)
13. [Will Big Data end the Executive Gut Feeling](#)  
Telenor Group (Feb 2013)
14. [Big Data – 90% of all data has been generated the two last years](#)  
IT News (Feb 2013)
15. [A Vital New Marketing Metric: The Network Value of a Customer](#)  
Predictive-marketing.com (Sept 2010)
16. [Telenor researchers reveal how iPad spreads](#)  
Telenor Group (May 2011)

## Talks - International Industrial Conferences

1. **Big Data Science from a telecom perspective**  
2015 The Decision Support Day, Oslo, Norway

2. **Data Science on large mobile phone datasets**  
2015 Santander Digital Week, Oslo, Norway
3. **Data science**  
2015 Innovation Day, Affecto, Oslo, Norway
4. **Big Data and Predictive Analytics** (international keynote)  
2013 Big Data Europe, Zurich, Switzerland
5. **Improving Business With Data Science**  
2014 Gurus of Business Intelligence, Oslo Spektrum, Norway
6. **Big Data - how far can we go?**  
2013 New Media Network, Oslo, Norway
7. **13 times better hitrate with Machine Learning**  
2013 IT-Tinget, Tønsberg, Norway
8. **Using Big Enough Data to Give the Customers what they want**  
2013 Telenor Group, Oslo, Norway
9. **Big Data in Telecom: Making an impact on peoples lives**  
2013 Arrangement with UN Global Pulse, NorthEastern University (200 ppl), Oslo, Norway
10. **Insights and applications of customer data: Focus on Advanced Analytics**  
2011 Information Management, Oslo, Norway, Norway
11. **Advanced Analytics in Telecom**  
2012 Information Management, Copenhagen, Denmark

## Formal References & Recommendations By Manager

- [Astrid Undheim](#) Vice President, PHD Telenor Group Research, Analytics & AI
- [Geoffrey Canright](#) Vice President, PHD, Professor Telenor Group Research, Big Data Analytics
- [Rima Venturin](#) Research Manager Telenor Group Research
- [Dr Stein V. Haugan](#) Executive Director, PHD Hinode Science Data Centre Europe, UIO
- [Dr Kenji Shibuya](#) Director, PHD World Health Organization, Switzerland
- [Prof. Hugo ZBinden](#) Professor, PHD Quantum Communication, UiG, Switzerland
- [Prof. Johannes Skaar](#) Professor, PHD Fiberoptics Group, NTNU
- [Prof. Jon Otto Fossum](#) Professor, PHD Dep.of Physics, NTNU
- [Prof. Dag Hjelme](#) Professor, PHD Fiberoptics Group, NTNU
- [Prof.emeritus Bjørn Larsen](#) Professor, PHD Dep. of Biotechnology, NTNU