

4th Norwegian Big Data Symposium

Special Theme: INTERACTIVITY AND ROBOT JOURNALISM

NOBIDS 2018

**14 November 2018
Trondheim, Norway**

Web page: <https://www.ntnu.edu/nobids>

Motivation & Topics of Interest

NOBIDS 2018 welcomes the submission of original research and application papers dealing with all aspects of Big Data.

The impact of Big Data and large-scale data infrastructures is now visible in science, business, government and civil society. Companies store more data than anyone could imagine just a few years back, and the proliferation of open linked data has made it possible to share well-defined data across organizational and geographical boundaries. Big data and data analytics are rapidly expanding research areas that are of great importance to both industry and academia. The focus is on scalable techniques for intelligent data production, collection, classification, storing, integration, analysis and visualization. Big Data is multi-disciplinary of nature and is closely linked to industrial innovation and value creation.

The 4th Norwegian Big Data Symposium (NOBIDS 2018) focuses on Big Data applications and Big Data research from all disciplines. This year NOBIDS has a special focus on interactivity and robot journalism.

Robot journalism, in other words automated reporting of news, seen as a great help for journalists by some people while others think that it will replace journalists. While the debate goes on the technological advancements within the domain continues to excite the computer scientists and makes the journalists to prepare for the future of journalism. Robot journalism deals with big amounts of news data in order to create individual stories automatically.

Interactivity focuses on the human computer interaction in the context of big data and robot journalism. Automatic generation of personalized news, chatbots and, any user feedback and interactivity based systems are of interest in this context.

NOBIDS 2018 aims to bring researchers and industry practitioners together to exchange ideas, establish collaborations and share experiences within the special theme of interactivity and robot journalism.

There are already a number of successful applications of Big Data solutions in Scandinavian companies. A central objective of the symposium is to create an interdisciplinary community that addresses industry-relevant issues in Big Data and promotes fruitful collaboration between researchers, companies and practitioners. The symposium itself is divided into an industry track and a research track:

- *Industrial track:* Invited speeches on industrial Big Data applications in Scandinavia
- *Research track:* Scientific papers on Big Data and its possible applications

Topics of interests for the research track of NOBIDS 2018 include but are not limited to:

- Robot journalism
- Conversational systems and chatbots
- News summarization, classification and sentiment analysis
- Fake news detection
- Scalable AI/machine learning
- Industrial applications of big data and data analytics
- Big data management and life cycle support
- Big data architectures
- New programming models and platforms for big data computing
- Cloud/grid/stream computing for big data
- Big data on mobile platforms
- Large-scale semantics and open linked data
- Scalable Natural Language Processing
- Recommender systems and personalization
- Detection of trusted news sources
- News analytics
- User experience and visualization of big data
- User intelligence and user profiling
- Social media systems
- Anonymization, privacy and security
- Business models for big data
- Legal aspects of open and protected data
- Evaluation and benchmarking of big data applications

NOBIDS 2018 is held in conjunction with the NxtMedia Conference (<http://nxtmediaconference.no>) in

Trondheim.

Keynote Speakers

From Big Data to Smart Data: Changing Behavior with Online Communication, Anna Fensel

The humanity is rapidly developing and persistently experiencing local and global challenges, such as global warming/climate change, disbalances in demand and supply, reaching efficiency and handling complexity. Mastering most (if not all) of them require a behavior change. At the same time on the technical side, the dramatic growth of data volumes (Big Data) in the infrastructures, the data's heterogeneity and increased power and impact on the people's daily lives are calling for new methods, practices and policies for data management. Herewith the role of semantic technology becomes even more crucial: particularly, when it comes to providing and sharing a well-defined meaning, reducing complexity, and eventually delivering Smart Data for a functional and fair data value chain. I discuss Smart Data service enablers for interoperability, interactivity and human participation and behavior change, as well as demonstrate them in applications going beyond the current state of the art in the domains of energy efficient smart buildings, and online communication and marketing. In conclusions, I outline some of the data value chain -related challenges for future work.

The Bright Future of News Automation, Carl-Gustav Linden

We have all heard about robot journalists coming to take the jobs in newsrooms. However, it should not come as a surprise to anyone that there are no robots moving around in news automation. Instead, we are talking about new software introduced in the newsroom, a process that already has been going on for decades. In his talk, Adjunct Professor Carl-Gustav Lindén from the University of Helsinki (Swedish School of Social Science), will present his experiences of introducing news automation to journalists. He was the manager of the R&D project Immersive Automation (www.immersiveautomation.com) that is now continuing as a European project funded by Horizon 2020. Dr. Lindén will look into the future of news automation where we just have taken the first small steps on a journey towards a software environment that will help journalists with tasks they cannot manage and work they do not want to do.

Important Dates

Paper submission: 10th October 2018

Authors notification: 20th October 2018

Camera-ready due: 1st November 2018

Workshop date: 14th November 2018

Submission Details

All submissions to the research track should be made using the *EasyChair Conference System*.

The papers must be formatted according to the IEEE 2-column conference article format and submitted as a pdf file. We solicit three types of papers:

- Long papers: Up to 8 pages, including references
- Short papers: Up to 4 pages, including references
- Demo papers: 2-4 pages, including references

Accepted papers will be published online in a [CEUR](#) workshop proceedings. At least one author of each accepted paper must attend the workshop. A selection of the best papers will be invited to publish in a special issue of an NTNU Open Access journal on big data and analytics.

Location

NOBIDS 2018 is hosted at Adresseavisen in the center of Trondheim. The address is Ferjemannsveien 10, just a few meters away from the main restaurant district in Trondheim, Solsiden.

Registration

There is no registration fee for NOBIDS 2018. Participation is free of charge, though the participants are encouraged to register also for the NxtMedia conference the day after.

Organizers & Chairs

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Rolf Dyrnes Svendsen, Adresseavisen

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Carl Gustav Lindén, University of Helsinki, Finland

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