



Western Norway Research Institute



WESTERN NORWAY RESEARCH INSTITUTE
VESTLANDSFORSKING

www.vestforsk.no

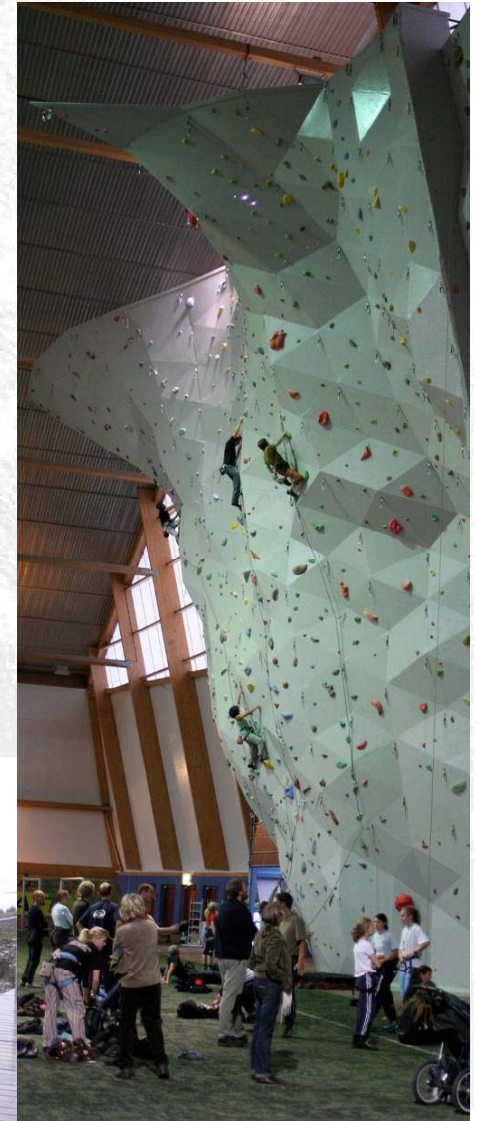
Welcome to Sogndal and to WNRI

- A research institute with broad international collaboration and regional entrenchment.
- **Vision**
The promotion of knowledge development and sharing
- **Core values**
 - critical and independent
 - transparency - knowledge sharing
 - high quality a distinguishing characteristic of all activities
- **Characteristics**
 - Cross-sectorial research
 - International research collaboration and networking



Western Norway Research Institute

- Established on 6 March 1985
- Non-profit foundation
- 90% assignment-based
- Employs a staff of 30 – from 7 nations



International Strategy

- Goal: 25% international funding
- Networking and cooperation
 - Scientific Advisory Boards
 - Research and industry cooperation
 - EU and others
- International staff exchange
- Long history of cooperation in EU and EEA funded research projects since 1990s



Research Departments

- Information Technology
- Climate change & Environment
- Sustainable Tourism
- Renewable Energy

Department of Information Technology

Objective

- to apply information technology in new contexts
- adapting and further developing systems, as well as
- developing new solutions to meet special needs





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Aaberge



Rajendra
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Our Team



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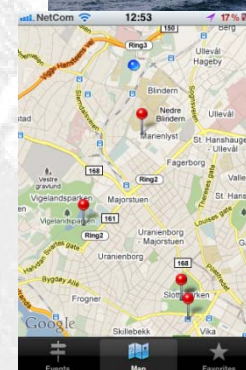
Ingjerd
Skogseid



Svein
Ølnes

Department of Information Technology

- Principal research areas
 - Semantic technologies
 - Information structures
 - Organisational changes with ICT
- with application to
 - Oil and Gas industry
 - e-Government
 - e-Health
 - Tourism
 - Regional development



Information Architecture and Semantic technologies

- ICT through interoperability and semantic technologies
 - leading to new ways of cooperating and communicating in the society – industry, municipalities, eGovernment etc
 - Oil industry, health services, environment monitoring, government administration etc



Bilder: StatoilHydro

Cooperation

- **ISO 15926 and semantic technologies**
 - WNRI coordinating partner
- **Resource network for e-Government**
 - WNRI responsible for interoperability
- **International Conference Series on Web Intelligence, Mining and Semantics **WIMS****
 - Intelligent approaches to transform the World Wide Web into a global reasoning and semantics-driven computing machine
 - wims.vestforsk.no



Recent Projects

- **MetaMoses**

- METAdata and MOBILE Superdistribution Extension System (in collaboration with Fraunhofer IDMT)
- <http://www.4fo.de/en/metamoses>



SESAM4

- to make semantic technology understandable and accessible for organisations and small/medium-sized enterprises.
- <http://sesam4.net/>



On-going Projects

- Semantic Sognefjord.no
 - Jointly with the Norwegian Tourism Industry, represented by [Visit Sognefjord](#),
 - To develop the next generation of web-based tourism services based on semantic technology.
- Semantic Markup for Fjord Norway
 - Explore how Fjordnett can make use of semantic annotation in their websites
 - [NCE Tourism](#) – Fjord Norway



Recent Publications

- Rajendra Akerkar, Terje Aaberge (2011) "Semantically linking virtual communities", (Eds. Christo El Morr & Pierre Maret) *Virtual Community Building and the Information Society: Current and Future Directions*, IGI Global Publishers, 2011, ISBN 1609608690.
- Terje Aaberge, Rajendra Akerkar and Harold Boley (2011) "An Intensional Perspective on the Semantic and Pragmatic Web". *Int. J. Metadata, Semantics and Ontologies*, 6 (1), 74-80.
- Rajendra Akerkar, (2011), "Evolving rules using genetic fuzzy approach - an educational case study". *International Journal on Soft Computing (IJSC)*, Vol.2, No.1, pp 34-46, February 2011.
- Rajendra Akerkar, (2011) "An Automatic Evolution of Rules to Identify Students' Multiple Intelligence", (Eds. N. Meghanathan et al.) *Proceedings of International Conference on Computer Science & Information Technology (CCSIT-2011)*, Springer (LNCS) in *Communications in Computer and Information Science (CCIS) Series*, CCIS 133, pp. 35-45, 2011.
- Akerkar, R. (2010): A neuro-fuzzy decision support system for selection of small scale business. In: E. Hüllermeier, R. Kruse, and F. Hoffmann (Eds.): *Proceedings of IPMU 2010, Part II*, CCIS 81, pp. 306–315, 2010, Springer-Verlag Berlin Heidelberg 2010.07.02

Recent Publications

- Aaberge, Terje (2010): Picturing Semantic Relations, In: Heinrich, R., Nemeth, E. and Pichler, W. (eds.): The 33d International Wittgenstein Symposium, LWS, Kirchberg. Utgjevar: The Austrian Wittgenstein Society, 2010 Kirschberg am Wechsel
- Ølnes, Svein (2010): Interoperability in Public Sector – How Use of a Lightweight Approach Can Reduce the Gap Between Plans and Reality. In: IFIP eGov 2010 Conference. Springer-Verlag Berlin Heidelberg, 31.08.10, Lausanne, Sveits
- Akerkar, Rajendra (2010): Generic Multilayer Architecture of Knowledge-Based System for Structured Knowledge. Representation. In: Journal of Hybrid Computing. Publisher: Serials Publishers, Vol.3 No.1, pp 19-25, Jan-June 2010
- Dralega, C., Due, B. And Skogsbø, E. (2010) Community Re-engagement of Youth: eParticipation Realities in Uganda and Norway. In: Information technologies and International Development. Vol. 6, No 1, s. 94 – 108. University of North Carolina, Annenberg Press

Recent Publications

- Dralega, Carol (2010): Uganda's ICT Policy Framework: Strengths and Disparities in Reaching the Last mile. In: Adomi E. (ed.) Handbook of Research on Information and Communication Technology Policy: Trends, Issues and Advancements. IGI Global, PA, USA
- Skogseid, Ingjerd, Grøtte, Ivar Petter og Strand, Geir (2010): Rural Infrastructure Development as a Staged Modell – A Roadmap to new Rural Infrastructure Norsk konferanse for organisasjoners bruk av informasjonsteknologi, NOKOBIT 2010. Høgskolen i Gjøvik 22. – 24. november 2010
- Akerkar, Rajendra (2010): Knowledge based systems for development. In e-book: Advanced knowledge based systems: models, applications, and research. Published by TMRF e-Book. Vol. 1, pp 1-11, 2010.

Thank you!

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