Prizes and academic awards received by personnel of the unit

Name: Professor Erkki Oja

- INNS Hebb Award, 2010
- Honorary Doctor, University of Eastern Finland

Name: Professor Olli Simula

• 2011 EspooAmbassador prize

## Gayle Lee, Jaakko Peltonen, and Sami Kaski

• Best paper award, "Focused Multi-task Learning Using Gaussian Processes",in ECML PKDD 2011.

# Hannu Pulakka, Ulpu Remes, Santeri Yrttiaho, Kalle Palomäki, Mikko Kurimo, and Paavo Alku

• Best paper award, "Low-Frequency Bandwidth Extension of Telephone Speech Using Sinusoidal Synthesis and Gaussian Mixture Model", ISCA Award for the best student paper of Interspeech 2011.

## Jaakko Viinikanoja

• Master's Thesis Award of Pattern Recognition Society of Finland

## Important international positions of trust held by personnel of the unit

## Professor Juha Karhunen:

• Program Committee Member:

The 5th Int. Workshop on Hybrid Artificial Intelligence Systems (HAIS2010), San Sebastian, Spain, June 2010

Analysis and Signal Separation (LVA/ICA 2010), Saint-Malo, France, September 2010

The European Symposium on Artificial Neural Networks (ESANN 2010), Bruges, Belgium, April 2010

The 11th Int. Conf. on Intelligent Data Engineering and Automated Learning (IDEAL 2010), Paisley, Scotland, UK, September 2010

Int. Conf. on Neural Computation (ICNC 2010), Valencia, Spain, October 2010

The 4th Int. Conf. on Computational Intelligence in Security for Information Systems (CISIS'11)

The European Symposium on Artificial Neural Networks (ESANN 2011)

The 6th Int. Conf. on Hybrid Artificial Intelligence Systems (HAIS11)

Int. Conf. on Neural Computation Theory and Applications (NCTA 2011)

The 2011 IEEE Machine Learning for Signal Processing Workshop

Int. Conf. on Intelligent Data Engineering and Automated Learning (IDEAL 2011)

• Editorial Board Member, Neural Processing Letters, The Netherlands.

## Professor Samuel Kaski:

• Program Committee Member:

ICML2010 Workshop on Reinforcement learning and search in very large spaces, Haifa, Israel, 21.-24.6.2010.

2010 IEEE/WIC/ACM International Conference on Web Intelligence (WI'10), Toronto, Canada, Aug. 31 - Sept 3, 2010.

ECML PKDD 2010, Barcelona, Spain, Sept. 20-24, 2010.

European Symposium on Artificial European Symposium on Artificial Neural Networks ESANN'2010, April 2010, Bruges, Belgium.

International Conference on Machine Learning, ICML 2010, June 21 - June 25, 2010, Haifa, Israel.

Asia-Pacific Bioinformatics Conference, APBC2010, Jan 18-21, 2010, Bangalore, India.

ICPR 2010, the 20th International Conference on Pattern Recognition, 23-26 August, 2010, Istanbul, Turkey.

Mining and Learning with Graphs, MLG 2010, Washington, D.C., USA, July 24-25. KDD-2010, the 16th ACM SIGKDD Conference on Knowledge Discovery and Data Mining, July 25-28, Washington, D.C., USA.

#### • Session Chairman:

ICML2010 Workshop on Reinforcement learning and search in very large spaces, Haifa, Israel, 2010

• Member of Steering Committee, EU NoE PASCAL2, UK.

 Associate Editor, International Journal of Knowledge Discovery in Bioinformatics, USA, 2010.

• Editorial Board Member:

Intelligent Data Analysis, The Netherlands. International Journal of Neural Systems, Singapore. Cognitive Neurodynamics, Germany.

• Opponent at the doctoral dissertation of Jüri Reimand, University of Tartu, Estonia, 2010

## Professor Erkki Oja:

• Conference Chairman:

IEEE International Workshop on Machine Learning for Signal Processing (MLSP) 2010

International Conference on Artificial Neural Networks (ICANN) 2011.

- Member of the committee, College of Fellows, International Neural Network Society, INNS, USA, 2011.
- Member of the Award Committee IEEE Computational Intelligence Society, USA, 2011.
- Member of the Fellowship Committee, IEEE Computational Intelligence Society, USA, 2011.
- Member of the EU FET Flagship -program External Advisory Group 2011.
- Editorial Board Member:

Natural Computing - An International Journal, The Netherlands. Neural Computation, USA.

International Journal of Pattern Recognition and Artificial Intelligence, Singapore.

- Invated talk in Sino-foreign-interchange Workshop on Intelligence Science and Intelligent Data Engineering (IScIDE), Harbin, China, May 31, 2010.
- International Joint Conference on Neural Networks (IJCNN), Barcelona, Spain 2010.

#### Professor Olli Simula:

• Scientific Council Member, Institute Eurecom, France, 2011.

#### Dr. Francesco Corona:

 Pre-examiner of doctoral thesis: Gines Rubio, Universidad de Granada, Spain.

#### Dr. Antti Honkela:

• Program Committee Member, 5th IAPR International Conference on Pattern Recognition in Bioinformatics, PRIB 2010, Nijmegen, The Netherlands, 22.-24.9.2010.

• Session Chairman:

EPSRC Symposium Workshop on Learning and inference in computational systems biology (LICSB), University of Warwick, U.K., 30.-31.3.2010.

## Dr. Timo Honkela:

- Program Committee Member: ICANN 2010 Intl Conference on Artificial Neural Networks, Thessaloniki, Greece, 15.-18.9.2010.
- Chair, International Federation on Information Processing (IFIP), WG12.1 (Knowledge Representation and Reasoning), Austria.
- Representative of Finland, International Federation on Information Processing (IFIP), TC12 (Artificial Intelligence), Austria.
- Member of Executive Board, ENNS, European Neural Networks Society, The Netherlands.
- Editorial Board Member, Constructivist Foundations, Austria.
- Pre-examiner of a doctoral theses, Alicia Perez Ramarez, The University of the Basque Country, Spain 2010.
- Opponent at the doctoral dissertation:
   Michael Kai Petersen, Technical University of Denmark, Denmark, 2010.
   Bartlomiej Wilkowski, Technical University of Denmark, Denmark, 2011.

#### Dr. Arto Klami:

• Program Committee Member: PASCAL2/ICANN Challenge on MEG Mind Reading, 2011.

#### Dr. Markus Koskela:

- Program Committee Member: The 2010 IEEE Pacific-Rim Conference on Multimedia (IEEE-PCM2010), Shanghai, China, 21.-24.9.2010
- Pre-examiner of a doctoral theses, Pablo Toharia Rabasco, Universidad Politecnica de Madrid, Spain, 2010.

## Dr. Mikko Kurimo:

• Program Committee Member:

The Annual Meeting of the Association for Computational Linguistics, Uppsala, Sweden, 11.-16.7.2010.

Interspeech 2010, Makuhari, Japan, 26.-30.9.2010.

Interspeech 2011 Firenze, Italy.

Eusipco 2011 Barcelona, Spain.

ACL-HLT Portland kesäkuu 2011.

• Session Chairman:

Interspeech 2011 Firenze, Italy.

- Editorial board member, ACM Transactions on Speech and Language Processing.
- Editor, Multilingual Information Access Evaluation I Text Retrieval Experiments, 10th Workshop of the Cross-Language Evaluation Forum, CLEF 2009, Corfu, Greece, September 30 October 2, 2009, Revised Selected Papers, Part I. Lecture Notes in Computer Science.
- Evaluator of funding applications, Swiss National Science Foundation 2011.

## Dr. Jorma Laaksonen:

• Program Committee Member:

The International Conference on Image Analysis and Recognition (ICIAR 2010), Povoa de Varzim, Portugal, June 21-23, 2010.

• Associate editor and member of editorial board, Pattern Recognition Letters, The Netherlands, 2011.

## Dr. Yoan, Miche:

• Programme committee member:

European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning, Bruges, Belgium, 28-30th April 2010

#### Dr. Jaakko Peltonen:

• Program Committee Member:

Seventh International Symposium on Neural Networks (ISNN 2010), Shanghai, China, June 6-9, 2010 ISNN 2011, 8th International Symposium on Neural Networks, Guilin, Kiina, 29.5.2011-1.6.2011

• Chairman of the session:

ECML PKDD 2011, European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases, Ateena, Kreikka, 5.9.2011-9.9.2011.

• Editor of scientific journals: Neurocomputing (special issue on Machine Learning for Signal Processing; managing guest editor).

• Editorial Board Member, Neural Processing Letters, The Netherlands.

## Dr. Tapani Raiko:

• Program Committee Member: The 27th International Conference on Machine Learning (ICML 2010), Haifa, Israel, 21.-24.6. 2010

• Editor of scientific journals: Neurocomputing (special issue on Machine Learning for Signal Processing

#### Dr. Kimmo Raivio:

• ICT Domain expert, COST (European Cooperation in Science and Technology) 2010, Belgium.

#### Dr. Miki Sirola:

• Program Committee Member:

International Conference on Networked Digital Technologies (NDT 2010), Prague, Czech Republic, 7 - 9 July 2010 International Conference on Networked Digital Technologies (NDT 2011). Macau, China, 18 - 21 July 2011 IEEE International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS'2011) International Conference on Computational Intelligence and Bioinformatics (CIB 2011).

• Session Chairman:

IEEE International Workshop on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS'2011).

## Dr. Ricardo Vigário:

• Program Committee Member:

International Steering Committee of the 9th International Conference on Latent Variable Analysis and Signal Separation (LVA/ICA'2010), St. Malo, France, September 27-30, 2010.

Int. Symposium on Intelligent Data Analysis (IDA'2011), Porto, Portugal.

## Dr. Zhirong Yang:

• IEEE / WIC / ACM International Conferences on Web Intelligence, Toronto, Canada, 31.8.- 3.9.2010.

- $\bullet$  The 28th International Conference on Machine Learning, Bellevue, Washington, 28/6/2011-2/7/2011.
- IEEE/WIC/ACM International Conference on Web intelligence, Lyon, France, 22-27 August, 2011.

## M.Sc. Leo Lahti:

• Member of the COST/EUGESMA working group, U.K., 2009.

## Important domestic positions of trust held by personnel of the unit Professor Juha Karhunen:

• Program Committee Member:

The 20th IEEE International Workshop on Machine Learning for Signal Processing (MLSP 2010), Kittilä, Finland, August-September 2010 Int. Conf. on Artificial Neural Networks (ICANN 2011)

#### Professor Samuel Kaski:

• Program Committee Member:

Machine Learning for Signal Processing, MLSP 2010, Kittilä, Finland, 29.8.-1.89.2010.

International Conference on Artificial Neural Networks (ICANN 2011), Espoo, Finland.

• Session Chairman:

Machine Learning for Signal Processing, MLSP 2010, Kittilä, Finland, 2010.

Invited talk: Methods for analyzing multiple metabolomics data sources, Metabomeeting 2011, Finland.

## Professor Erkki Oja:

- Programme committee member: International Conference of Artificial Neural Networks (ICANN) 2011.
- Chairman, Research council for natural sciences and engineering, Academy of Finland
- Member, Governing Board of the Academy of Finland
- Opponent at the doctoral dissertation of Ville Heikkinen, University of Eastern Finland, 2011.

#### Professor Olli Simula:

- Chairman, IEEE Computer Chapter, Finland.
- Program Committee Member: 8th International Conference on Self-Organizing Maps (WSOM 2011).

Twenty-second International Conference on Algorithmic Learning Theory (ALT 11) and Fourteenth International Conference on Discovery Science (DS 2011), jointly ALT/DS 2011.

## Dr. Francesco Corona:

• Programme and organising committee member:

Machine Learning for Signal Processing, MLSP 2010, Kittilä, Finland, 29.8.-1.89.2010.

ICANN 2011: International Conference on Artificial Neural Networks, Espoo (Finland), June 14-17th, 2011.

WSOM 2011: 8th International Workshop on Self-Organizing Maps, Espoo (Finland), June 13rd-15th, 2011.

 Pre-examiner of a doctoral thesis: Harri Niska, University of Eastern Finland, 2011.

#### Dr. Antti Honkela:

 Program Committee Member: Machine Learning for Signal Processing, MLSP 2010, Kittilä, Finland, 29.8.-1.89.2010.

## Dr. Timo Honkela:

- Program Committee Member: Contexts of Language: How to analyze context?, Helsinki 10.-11.12.2010. International Conference of Artificial Neural Networks (ICANN) 2011.
- Editorial Board Member, Puhe ja kieli, Finland.
- Editorial Board Member, Tieteessä tapahtuu, Finland.
- Member of Steering Committee, Languet Finnish Graduate School in Language Studies, Finland, 2009.
- Board Member, Hecse Helsinki Graduate School in Computer Science and Engineering, Finland, 2009.
- Opponent at the doctoral dissertation: Antti Airola, University of Turku.

## Dr. Markus Koskela:

- Vice President, Suomen hahmontunnistuksen seura ry, Pattern Recognition Society of Finland 2010-2011.
- Pre-examiner of the doctoral thesis: Ville Heikkinen, University of Eastern Finland, 2011. Sami Huttunen, University of Oulu, 2011.
- Opponent at the doctoral dissertation of Sami Huttunen, University of Oulu, 2011.

#### Dr. Mikko Kurimo:

 Program Committee Member: International Conference of Artificial Neural Networks (ICANN) 2011.

Morpho Challenge Workshop 2010, Espoo, Finland, 2.-3-9.2010 IEEE Workshop on Machine Learning for Signal Processing, Kittilä, Finland, 29.8. -1.9.2010.

- Session chairman, IEEE Workshop on Machine Learning for Signal Processing, Kittilä, Finland, 29.8. -1.9.2010.
- Editor, Proceedings of the Morpho Challenge 2010 workshop.
- Opponent at the doctoral dissertation of Rahim Saeidi, University of Eastern Finland, 2011.

#### Dr. Jorma Laaksonen:

- Programme committee: 8th WORKSHOP ON SELF-ORGANIZING MAPS, WSOM 2011 Otaniemi, 13-15.6.2011.
  2010 IEEE International Workshop on Machine Learning for Signal Processing, August 29 - September 1, 2010 Kittilä, Finland.
- Pre-examiner of a doctoral theses: Alexey Andriyashin, University of Eastern Finland, 2011. Teemu Kinnunen, Lappeenranta University of Technology, 2011.
- Opponent at the doctoral dissertations: Vili Kellokumpu, University of Oulu, 2011. Teemu Kinnunen, Lappeenranta University of Technology, 2011.
- Programme committee member: ICANN 2011: International Conference on Artificial Neural Networks, June 14-17th, 2011, Espoo, Finland.

#### Dr. Jaakko Peltonen:

- Programme committee: The Twentieth IEEE International Workshop on Machine Learning for Signal Processing (MLSP 2010), Kittilä, Finland ICANN 2011, 8th Intl Workshop on Self-Organizing Maps, 14.-17.6.2011 WSOM 2011, 8th Intl Workshop on Self-Organizing Maps, 13.-15.6.2011
- Advisor and board member, Helsinki Graduate School on Computational Science and Engineering.

## Dr. Tapani Raiko:

• Programme and organising committee, 2010 IEEE International Workshop on Machine Learning for Signal Processing, Kittilä, Finland, 29.8.-1.9.2010.

• Vice Chairman, Finnish Artificial Intelligence Society, Suomen Tekoälyseura, Finland, 2010.

### Dr. Kimmo Raivio:

• Pre-examiner of a doctoral thesis: Gabor, Fekete, University of Jyväskylä, 2010.

## Dr. Ricardo Vigário:

- Membership of the organising committee, Int. Conf. on Artificial Neural Networks (ICANN'2011), Espoo.
- Pre-examiner of a doctoral thesis: Igor Kalyakin, University of Jyväskylä.

## M.Sc. Leo Lahti:

• Vice Chairman, Finnish Society for Bioinformatics, 2010.

### M.Sc. Mari-Sanna Paukkeri:

• Program Committee Member, International Conference of Artificial Neural Networks (ICANN).

## Research visits abroad by personnel of the unit

- Lasse Hyyrynen, University of Tallin, Estonia, 4 months, 2010
- Tommi Vatanen, CERN, Geneve, Switzerland, 1 month, 2010.
- Dr.(Tech.) Kalle Palomäki, University of Sheffield, UK, 4 months, 2010.
- Dr.(Tech.) Antti Honkela, University of Manchester, UK, 7 months, 2010.
- Mikael Kuusela, CERN, Geneve, Switzerland, 3 months, 2010.
- Dr.(Tech.) Tapani Raiko, New York University, 1 month, USA, 2010.
- Dr.(Tech) Leo Lahti, European Bioinformatics Institute EBI, UK, 1 month, 2010.
- Dr.(Tech.) Mikko Kurimo, Nagoya Institute of Technology, Japan, 2 months, 2010.
- PhD Francesco Corona, University of Cagliari, Italy, 2 months, 2010.
- M.Sc. Ulpu Remes, Nagoya Institute of Technology, Japan, 4 months, 2010.
- M.Sc. Dusan Sovilj, Leibniz Institute for Baltic Sea Research, Warnemünde, Germanu, 2 months, 2010.
- Dr.(Tech.) Jaakko Peltonen, University of Sheffield, Sheffield Institute for Translational Neuroscience, UK,2 months, 2010.
- PhD Francesco Corona, University of Cagliari, Italy, 3 months, 2011.
- Dr.(Tech.) Jaakko Peltonen, University of Sheffield, Sheffield Institute for Translational Neuroscience, UK,8 months, 2011.
- Dr.(Tech.) Arto Klami, University of California, Berkeley, USA, 2 weeks, 2011.
- B.Sc. Mikael Kuusela, Fermilab Country, USA, 2 months, 2011.
- Dr.(Tech.) Kalle Palomäki, University of Sheffield, UK, 3 weeks, 2011.
- M.Sc. Ulpu Remes, Nagoya Institute of Technology, Japan, 4 months, 2011.

## Research visits by foreign researchers to the unit

- PhD Tanel Alumäe, Tallinn University of Technology, Estonia, 3 months, 2010
- PhD Rama Sanand Doddipadla, IIT Kanpur, India, 4 months, 2010.
- M.Sc. Kairit Sirts, Tallinn University of Technology, Estonia, 1 month, 2010.
- Prof. Morgan Nelson, ICSI Berkeley, USA, 1 day, 2010.
- PhD Federico Montesino Pouzols, University of Sevilla, Spain, 12 months, 2010.
- PhD Alberto Guillen, University of Granada, Spain, 1 month, 2010.
- M.Sc. Benoit Frenay, M.Sc., Universite Catholique de Louvain, France, 2 months, 2010.
- Prof. Antoni Neme, National Autonomous University of Mexico, Meksiko, 4 months, 2010.
- PhD Koen van Leemput, Massachusetts General Hospital; Harvard Medical School, USA, 12 months, 2010.
- Assist. Prof. Milen Chechev, Sofia University, Bulgaria, 4 months, 2010.
- PhD Roman Naumov, Institute of Higher Nervous Activity and Neurophysiology, Moscow, Russia Federation, 1 month, 2010.
- M.Sc. Satoru Ishikawa, University of Aizu, Japan, 5 months, 2010.
- PhD Bjoern Menze, MIT, USA, 1 month, 2010.
- PhD Stan Smits, EIT ICT Labs, The Netherlands, Hollanti, 2 days, 2010.
- PhD Marie Sjölinder, SICS, Sweden, 3 days, 2010.
- Jorge Ramon Letosa, University of Zaragoza, Spain, 3 months, 2010.
- Alejandro Lopez Vidal, University Carlos III de Madrid, Spain, 3 months, 2010.
- PhD Mauricio Kugler, Nagoya Institute of Technology, Japan, 2 days, 2011.
- PhD Mathew Migimai Doss, IDIAP, Switzerland, 2 days, 2011.
- Prof. Eric Severin, University of Lille, France, 2 weeks, 2011.
- Prof. Asoke Nandi, University of Liverpool, UK, 1 day, 2011.
- Dean Jiang Xiuwen, Dahlian University, China, 1 day, 2011.
- Prof. Jose Principe, University of Florida, 2 days, 2011.
- Prof. Risto Miikkulainen, Universtiy of Texas at Austin, USA, 2 days, 2011.
- Prof. Thomas Griffiths, University of California, Berkeley, USA, 4 days, 2011.
- Prof. Geoffrey Hinton, University of Toronto, Canada, 4 days, 2011.
- Prof. John Shawe-Taylor, University College London, UK, 4 days, 2011.

• Prof. Joshua Tenenbaum, Massachusetts Institute of Technology, USA, 4 days, 2011.

- Prof. Barbara Hammer, Bielefeld University, Germany, 3 days, 2011.
- Hiroshi Mamitsuka, Tokyo University, Japan, 1 week, 2011.