

CURRICULUM VITAE

Beata Joanna Grzyb

Date and place of birth: August 20, 1980, Lublin, Poland

Nationality: Polish

PhD Student at the Robotic Intelligence Laboratory, Computer Science and Engineering Department. Jaume I University, Castellón, Spain.

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Studies

- May 2007: MSc in Computer Science, Maria Curie-Skłodowska University in Lublin, Poland. Specialization: Information Technology. Thesis title: "Alternative neuron models and properties of their networks", director prof. Wiesław Kamiński.
- June 2002: BSc in Marketing and Management, Maria Curie-Skłodowska University in Lublin, Poland.

Professional Experiences

- August 2003 – May 2007: Gdansk Artificial Brain Research Initiative (GABRI) volunteer. Developing and testing various artificial intelligence related applications including computational model of neuron, called Firing Cell.

Foreign languages

- English: very good. TOEFL certificate August 2006 (paper-based), marks 593.
- Spanish: good.

Stays

- July 15 – October 7, 2005: an intern to the Advanced Telecommunications Research Institute International (ATR) Network Informatics Laboratories, Kyoto, Japan. Working in a research team on the development of semi-physical semi-simulated robotic system. Creating a model of basic emotions and implementing an emotion expression system.
- August 18 – September 15, 2004: an intern to the Advanced Telecommunications Research Institute International (ATR) Network Informatics Laboratories, Kyoto, Japan. Participation in the Artificial Brain Project research activities by performing own experiments in machine psychodynamics and development of brain-building tools.

Research

Book chapters and Collections

- Beata J. Grzyb, Grzegorz M. Wójcik, Wiesław A. Kamiński, **The Choice of the Model of Neuron and its Influence on the Properties and Computational Efficiency of Liquid State Machine**, Polish Journal of Environmental Studies, SMI2008, Swinoujście 2008,

Poland, pp. 548-552.

- B. Grzyb, J. Bialowas, **Modeling of LTP-Related Phenomena Using an Artificial Firing Cell**, in *Neural Information Processing 2006*, LNCS 4232, Editors: Irwin King, Jun Wang, Laiwan Chan and DeLiang L, pp: 90-96.
- M. Joachimczak, B. Grzyb, D. Jelinski, **Universal Spike-Train Processor for a High-Speed Simulation of Pulsed Para-neural Networks**, in *Neural Information Processing 2004*, LNCS 3316, Editors: Nikhil R. Pal, Nikola Kasabov, Rajani K. Mudi, Srimanta Pal and Swapan K. Parui, pp: 416-421.

Conference Proceedings

- Beata J. Grzyb, Eris Chinellato, Antonio Morales, and Angel P. del Pobil, **Robust grasping of 3D objects with stereo vision and tactile feedback**, 11th International Conference on Climbing and Walking Robots and the Support Technologies for Mobile Machines, Coimbra, Portugal, September 2008. [The Industrial Robot Innovation Award 2008]
- Beata J. Grzyb, and Angel P. del Pobil, **Developing a sense of bodily self**, Proceedings of the Eighth International Conference on Epigenetic Robotics, July 2008.
- E. Chinellato, B.J. Grzyb, and A.P. del Pobil, **Brain Mechanisms for Robotic Object Pose Estimation**, Intl. Joint Conf. on Neural Networks, WCCI/IJCCN 2008, Hong Kong, China, June 2008.
- J. Bialowas, B. Grzyb, P. Poszumski, **Firing Cell: An Artificial neuron with a simulation of Long-Term-Potential-Related Memory**, *The Eleventh International Symposium of Artificial Life and Robotics, Beppu* (2006) Japan, pp. 731-734.
- B. Matosiuk, B. Grzyb, **Tension-based Movement Corrections of the Artificial Agent**, *The Eleventh International Symposium of Artificial Life and Robotics, Beppu* (2006) Japan.
- J. Bialowas, B. Grzyb, P. Poszumski, **Firing Cell: An Artificial Neuron with Long-Term Synaptic Potentiation Capacity**, *International Conference on Neural Networks and Brain ICNNB*, 2005, pp.1313- 1317.

Patents

- A. Buller & B. Grzyb, **A friend-making option for a mobile phone** (patent proposal accepted by ATR and registered under no. 1437), 2005.