PERSONAL DATA

Name: Dávid Csercsik
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EDUCATION AND DEGREES

- **PhD, Information Science** 2010 August,
  Pázmány Péter Catholic University Faculty of Information Technology,
  Interdisciplinary Doctoral School
  Supervisors: Gábor Szederkényi and Katalin Hangos

- **MSc, Biomedical Engineering** 2007 January, Budapest University of Technology and Economics

- **MSc, Electrical Engineering (**specialzed in systems and control engineering and biomedical technology**)** 2005 June, Budapest University of Technology and Economics

RESEARCH EXPERIENCE/APPOINTMENTS

- Pázmány Péter Catholic University, Faculty of Information Technology and Bionics
  2013 August - present: Postdoctoral Research Fellow
  Project: OTKA NF 104706 - Analysis and Control of Polynomial systems via optimization methods
  2012 September – 2013 August: Postdoctoral Assistant Professor

- MTA KRTK, KTI, Game Theory Research Group, 2014 April – 2015 December: Postdoctoral Research Fellow (part-time-employed)

- University of Otago, Department of Physiology (Centre for Neuroendocrinology), Ábrahám Laboratory
  2012 February – 2012 June: Postdoctoral Fellow – project: ANGELS – Activators of Non Genomic Estrogen-Like Signaling

- Computer and Automation Research Institute, Hungarian Academy of Sciences, Process Control Research Group
  2010 September – 2012 December: Research Fellow
  2006 September-2010 September: Assistant Researcher

MAIN RESEARCH GRANTS/PROJECTS

- Analysis and control of polynomial nonlinear systems using optimization methods, OTKA 104706, Pázmány Péter Catholic University , Senior Researcher, 2012-09-01-2016-08-31

- Model-based analysis and diagnosis of nonlinear systems using first principles, OTKA 83440, MTA SZTAKI, Researcher, 2011-07-01 - 2015-06-30

TEACHING EXPERIENCE

- Game theory and network applications, Pázmány Péter Catholic University, Faculty of Information Technology and Bionics, 2014 Fall

- Quantitative modelling and control of nonlinear molecular processes, Pázmány Péter Catholic University, Faculty of Information Technology and Bionics, 2014 Spring

- Computer Controlled Systems, Pázmány Péter Catholic University, Faculty of Information Technology and Bionics, 2013-2016 spring, 2007-2011 (assistant),

- Assistant in the Parameter Estimation of Dynamical Systems course, Pázmány Péter Catholic University, Faculty of Information Technology and Bionics, 2007-2009, 2013 fall.

- Assistant in Mathematics courses (Calculus, Multivariate Calculus, Complex Calculus), Budapest University of Technology and Economics 2002-2006 (spring and fall).

OTHER PROFESSIONAL ACTIVITIES

Reviewer in the following Journals:

- Journal of Theoretical Biology
- IFAC Automatica
- Neurocomputing
- Central European Journal of Operations Research
- Wireless Networks

Scientific Courses

- ACN 2013 Analysis of Complex Networks: Structure and Dynamics 20-22 February 2013, Politecnico di Milano, Italy

Invited Talks

- *Game-theoretic modelling of natural gas networks and markets*, Game Theory Seminars at the Corvinus University, Budapest, Hungary, 2016, March

- *Cell signaling models of various complexity,* University of Pécs, Szentágothai Research Centre, XI Szentágothai seminar, Pécs, Hungary, 2013, February

- *Competition and Cooperation in a simple PFF game theoretic model of electrical enery trade*
  University of Pannonia, Veszprém, Hungary, 2012, November

- *A partition function form game over routing networks*, Game Theory Seminars at the Corvinus University, Budapest, Hungary, 2012, October

- *Applications of partition function form transferable utility cooperative games*, Department of Mathematics and Statistics, University of Otago, Dunedin, New Zealand, 2012 March

- *Dynamical modelling and model analysis in neuroendocrinolgy,* Centre for Neuroendocrinology, University of Otago, Dunedin, New Zealand, 2012 February

- *Externalities in the game of generator rescheduling on electrical power transmission networks*, Game Theory Seminars at the Corvinus University, Budapest, Hungary, 2011, October

- *Energy Transmission Networks and Cooperative Game Theory I-II*, Institute of Economics, HAS, Budapest, Hungary, 2011 January, March

- *Mathematical Models in Cell Signaling: Scales and Approaches*, Centre for Neuroendocrinology, University of Otago, Dunedin, New Zealand, 2009 November

- *Parameter Estimation of a Hodgkin-Huxley type GnRH Neuron Model*, Institue of Experimental Medicine, HAS, Budapest, Hungary, 2009 April

- *On Mathematical Modelling of GnRH neurons*, IIM-CSIC Instituto de Investigaciones Marinas, Vigo, Spain, 2008 July

AWARDS AND HONORS

- MTA KRTK KTI Publication Award 2015
- MTA SzTAKI Institute Award, 2011-04-12
- MTA SzTAKI Young Researchers Award, 2010-11-24
- MTA SzTAKI Aspirants and PhD students 2008. “Best Presenter” award, 2008-11-12