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PERSONAL INFORMATION   Ion Necoară

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🌐 www.acse.pub.ro/person/ion-necoara

Sex: M | Date of birth: | Nationality: Romanian

POSITION

Professor

WORK EXPERIENCE

February 2009 - Present

Assistant Professor, Associate Professor, Professor
Politehnica Bucharest, Faculty of Automatic Control and Computers

- Teaching and research activities
- Head of *Optimization, Learning and Control Group*
- Senior Researcher Institute of Applied Mathematics Romanian Academy

EDUCATION

April 2007 – March 2009

Postdoc (Research Assistant): *Numerical optimization for large-scale problems*
KU Leuven, Belgium.

November 2002 – October 2006

Doctoral studies in *Applied Mathematics*
Technical University Delft, The Netherlands

October 2000 - July 2002

Master in Statistics and Optimization
University of Bucharest – Faculty of Mathematics and Computer Science

October 1996- July 2000

BA Mathematics
University of Bucharest – Faculty of Mathematics and Computer Science

- Mathematics
- Systems theory
- Numerical methods and optimization
- Probabilities and statistics

PERSONAL SKILLS

- Director for several national and international research projects (H2020, FP7, UEFISCDI – TE and PCE)

Organisational/managerial skills

- Head of *Optimization, Learning and Control Group* composed of 6 faculty members and several equipments for research.

Competences

Supervising several bachelor and master students and 7 phd students (Dr. A. Patrascu assist. professor at Univ. Bucharest; Dr. V. Nedelcu manager at Assystem Romania; Dr. D. Lupu assistant researcher at UPB; Dr. L. Ghinea; Drd. Y. Nabou; Drd. F. Chorobura; Drd. N. Kumar).

RECOGNITION

- Romanian representative at *European Control Association* (EUCA) since 2020.
- National Order *Faithful Service For Merit* from Romanian Presidency, 2017.
- *Fulbright* Visiting Professor fellowship at UNC (USA), 2017.

Awards

- *Excellence in Research* Award, in Engineering Sciences, Ad Astra, 2016.
- *Grigore Moisil* Award, in Information Technology, Romanian Academy, 2015.
- *Best Paper Award* in Journal of Global Optimization 2015 (ISI-Q1).

COMPETENTE P

ADDITONAL INFORMATION

Publications

- Author of more than 180 research papers (140 ISI papers out of which 60 ISI journal articles Q1 and Q2 with cumulative impact factor larger than 150). Available at: www.acse.pub.ro/person/ion-necoara
- About 3200 citations in GS and Hindex 29; 1300 citations in WoS and Hindex 20.

Visiting professor

University of North Carolina Chapel Hill, Universite Catholique de Louvain, NTNU, MIT, Cornell University, University Edinburgh, University Vienna, Linkoping University, etc

Projects

Director of 8 research grants: H2020 – ITN, NO Grants, FP7 – ICT, UEFISCDI – PCE, UEFISCDI - TE

FIELDS OF INTEREST

- Theory and methods for Convex – Stochastic - Big Data Optimization.
- Developing optimization algorithms with a focus on structure exploiting.
- Mathematical guarantees about performance of numerical optimization algorithms.

Current research topics

- Applying optimization techniques for developing new advanced controller design algorithms for complex systems (Embedded and Distributed Control/Model Predictive Control).
- Practical applications include: Big Data Models, Mining and Data Analytics (smart electricity grids, traffic networks, weather forecasts, distributed control, compressive sensing, image/signal processing, machine learning), Embedded Control, Control of Robots, Automotive Industry.

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