PERSONAL INFORMATION   Ion Necoară

📞 +40 214029195   📱 +40 745371890

✉ ion.necoara@upb.ro

🌐 www.acse.pub.ro/person/ion-necoara

Sex: M | Date of birth: 20/09/1977 | Nationality: Romanian

POSITION

Professor

WORK EXPERIENCE

February 2009 - Present

Assistant Professor, Associate Professor, Professor

University Politehnica Bucharest, Faculty of Automatic Control and Computers

- Teaching and research activities
- Head of *Optimization, Learning and Control Group*

2025 - Present

PhD advisor in systems engineering

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

Organisational/managerial skills

- Director for several national and international research projects (H2020, FP7, UEFISCD – TE and PCE)
- 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; Drd D. Lupu assistant researcher at UPB; Drd L. Ghinea; Drd. Y. Nabou; Drd. F. Chorobura; Drd. N. Kumar).

RECOGNITION

Awards

- 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.
- *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 130 research papers (42 ISI journal articles with cumulative impact factor larger than 100 out of which 30 Q1 and 10 Q2). Available at: www.acse.pub.ro/person/ion-necoara
- About *3000 citations in GS and Hindex 28; 1100 citations in WoK and Hindex 20.*

Proiects

Director of 6 research grants: H2020 – ITN, FP7 – ICT, UEFISCDEI – 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.

Prof. Dr. Ion Necoara
Automatic Control and Systems Engineering Department
University Politehnica Bucharest
Spl. Independentei, 313,
Bucharest, Romania