

CURRICULUM VITAE

Professor Galia Mladenova Angelova, Doctor of Sciences
Institute of Information and Communication Technologies, Bulgarian Academy of Sciences



Date and place of birth: 1.10.1955, Lom, Bulgaria

Education

1973 – National Mathematical High school "Acad. Lubomir Chakalov" – Sofia

1978 – M.Sc. in Informatics, Faculty of Mathematics and Mechanics, Sofia University "Kliment Ohridski"

1988 – PhD in Mathematics, Computer and Automation Institute of the Hungarian Academy of Sciences (MTA SZTAKI)

Affiliations at the Bulgarian Academy of Sciences (BAS)

1979 – 1987: mathematician and Research Assistant at the Institute of Mathematics, BAS

1987 – now: employee of the Institute of Information and Communication Technologies (IICT), Bulgarian Academy of Sciences (BAS)

after 1998: Associate Professor, PhD

after April 2010: Associate Professor, PhD, Doctor of Sciences

after January 2012: Full Professor in Computer Science

1 November 2018 – 31 October 2022: Director of IICT BAS, employed by BAS President

after November 2022: Chair of the Scientific Council of IICT-BAS

Areas of research competence

Artificial Intelligence:

- Natural language processing, computational linguistics (information extraction from text; analysis of medical patient records in Bulgarian language; automatic acquisition of conceptual information from text; analysis of image tags and automatic tag sense recognition)
- Knowledge representation, Effective search in conceptual information
- Big data analytics and visualisation
- User modelling, personalisation
- Digitisation, Intelligent management of digital content
- AI applications

Scientific publications, metrics, pages

Research publications: 172, from them 95 with impact factor or impact rank

Research publications after 2018 (5 years): 16, from them 13 with impact factor or impact rank

H-index: 8 (Scopus), 15 (calculated using Google scholar with removed auto-citations)

Research Gate: https://www.researchgate.net/profile/Galia_Angelova

Google scholar profile: <https://scholar.google.bg/citations?user=uHDXKC8AAAAJ&hl=en>

Homepage: <http://lml.bas.bg/~galia>

Number of citations in Google scholar: more than 3000 removing auto-citations

Completed research and applied projects

As Coordinator:

- 2012-2016: AComIn "*Advanced Computing for Innovation*" <http://iict.bas.bg/acomin/> , listed in the European Commission's book "Achievements of FP7: Examples that make us proud" (<https://eennl.files.wordpress.com/2016/02/nleu2016-achievements-of-fp7-examples-that-makes-us-proud-final.pdf>). AComIn is the "Best Innovative Project for 2016" in a Competition for Most Innovative Company and Best Innovative Project for 2016 organised by the Innovation and Technology Development Council with the Bulgarian Chamber of Commerce and Industry and the Bulgarian Academy of Sciences;
- 2014-2016: *National co-financing of AComIn*, grant DO1-192 of the Bulgarian Ministry of Education and Science;
- 2009-2012: EVTIMA "*Effective Search of Conceptual Information*", grant DO 02-292/2008 of the Bulgarian National Science Fund;
- 2005: FP6 MLCF-CT-2004-013233 Marie Curie Conference Grant for the Large Conference RANLP-2005 "*Recent Advances in Natural Language Processing*";
- 2003: FP6 IST Conference Grant for RANLP-2003 "*Recent Advances in Natural Language Processing*";
- 2001: FP5 HPCF-CT-2000-00329 Grant for the EuroConference RANLP-2001 "*Recent Advances in Natural Language Processing*";
- 2001-2003: FP5 IST-2000-8.1.5 BALRIC-LING "*BALkan Regional Information Centers for Awareness and Standardisation of LINGuistic Resources and Tools for Advanced HLT Applications*" – perhaps the first multi-partner project coordinated by Bulgaria in the Framework programmes of the European Commission (EC)

As principal investigator and leader of Bulgarian teams:

- 2018-2022: Leader of the IICT team in the eHealth National Research Programme
- 2014-2017: BG Representative in the COST Action ICT IC1307 "*iV&L Net: Integrating Vision and Language*" http://www.cost.eu/COST_Actions/ict/IC1307?management
- 2012-2015: BG161PO003-1.1.06-0023-C0001 "*Analysis and Identification of Dependencies in Big Data Repositories – applications for economic and technological analyses*", Operational Programme Competitiveness, Structural Funds funding period 2007-2013
- 2010-2014: BG Representative in the COST Action ICT IC1002 "*MUMIA: Multilingual and multifaceted interactive access*" http://www.cost.eu/COST_Actions/ict/mumia?management
- 2010-2011: FP7 ICT project PSIP "*Patient Safety through Intelligent Procedures in medication*", grant 216130 – leader of the Bulgarian team in IICT-BAS
- 2009-2010: FP7 REGPOT-2007-2 grant 229502 EVALIPP "*Evaluation of the Institute for Parallel Processing of the Bulgarian Academy of Sciences*" – participant as department head
- 2005-2007: Steering Committee Member and Work Package Leader in BIS-21++ Center of Competence FP6-2004-ACC-SSA-2, responsible for the WP "*Knowledge Based Systems and Language Technologies*"
- 2001-2004: Steering Committee Member and Work Package Leader in BIS-21 Center of Excellence ICA1-2000-70016, responsible for the WP "*Language Technologies*"
- 1998-2001: FP4 Copernicus'98 Joint Research Project 977074 LARFLAST "*Learning Foreign Language Scientific Terminology*" – Scientific coordinator and leader of the Bulgarian team, as an external collaborator of Sofia University "Kl. Ohridski"
- 1996–1998: DBR-MAT: *Knowledge Based Machine Aided Translation*, funded by the Volkswagen Foundation (Germany), a joint German-Bulgarian-Romanian project coordinated by Hamburg University – leader of the Bulgarian team

- 1995-1996: Principal investigator in DOC-GEN (Generation of hypertext documentation from the internal specifications of the object-oriented tool OBLOG). Performed for the Portuguese company OBLOG Software S.A.
- 1992-1995: DB-MAT: *Knowledge Based Machine Aided Translation*, funded by the Volkswagen Foundation (Germany), a joint German-Bulgarian project coordinated by Hamburg University – leader of the Bulgarian team. The project delivered a relatively advanced and sophisticated system supporting the translator with on-the-fly generated explanations about relevant domain knowledge

Running projects

- 2022-2026: Leader of the IICT team in the project COALition "Promoting Innovation Excellence in Transformation of Coal Regions to Climate-Neutral, Thriving Economies" Grant agreement 101087022 <https://cordis.europa.eu/project/id/101087022>
- 2022-2025: Leader of the IICT team in the European Digital Innovation Hub Zagore - EDIH Zagore - SynGREDiT project "Synergy for Green Regional Digital Transformation of South-east region of Bulgaria" <https://edih-zagore.eu/>

Awards

Big Award PITAGOR of the Bulgarian Ministry of Education and Science for 2015 in the category "Successful leader of international projects"

Expert activities

- 1998-2021 – Evaluator and Reviewer for the European Commission in the Framework Programmes FP5, FP6, FP7, H2020 and eContent
- 2002-2013 – National Contact Person in ICT in the Framework Programmes FP6 and FP7 of the European Commission
- 2013-2016 - Member of the Permanent Research Commission in Mathematics and Informatics of the Bulgarian National Science Fund
- 2008-2010 - Member of the (last) Specialised Research Committee for Informatics and Mathematical Modelling, Bulgarian High Attestation Commission
- Participation in more than 30 Research Committees for defence of PhD theses (including abroad in Aalborg, Denmark and Skopje, Macedonia) and for selection of post-docs as well as elections of Chief Research Assistants, Associate Professors and Full Professors
- 2005-2006 - Member of the European Board of ACL, the Association of Computational Linguistics
- 2016 - Evaluator for the Central Agency for finances and contracts of Latvia

Participation in Expert Groups supporting the Bulgarian Government and International Organisations

- 2015 – member of an Expert Group associated to the Ministry of Healthcare, for organising the assessment of treatment of diabetes and hypertonia using big data;
- 2017 – member of an Expert Group associated to the Ministry of Economics, for development of a Conception providing accelerated acceptance of Industry 4.0 in Bulgaria;
- 2017 – member of an Expert Group associated to the Ministry of Healthcare, for preparation of technical specifications of a national healthcare information system;
- 2018 – member of an Expert Group associated to the Ministry of Economics, for development of a Strategy for participation of Bulgaria in the 4th industrial revolution;
- 2019 – leader of the BAS Expert Group that proposed a Frame for development of a National Strategy for Artificial Intelligence in Bulgaria (in June 2019);

- 2019 – 2020: leader of the BAS Expert Group working on a National Strategy for development of Artificial Intelligence in Bulgaria (proposal to the government), and member of the team that finalised the [National Concept for the Development of Artificial Intelligence in Bulgaria until 2030](#);
- 2021 – member of the Expert Group associated to the Ministry of Innovation and Growth developing the Operational programme “Research, Innovation and Digitalisation for Smart Transformation”;
- 2021 – member of the Expert Group developing the package of BAS in the Bulgarian Recovery and Resilience Facility;
- 2020-2022: Member of the NATO Advisory Group on Emerging and Disruptive Technologies, nominated by Bulgarian Minister of Defence. This group has the mission to provide advice to NATO’s innovation efforts and challenge of existing approaches when it comes to the adoption of new technologies.

Organisation of scientific events

- After 2001, Chair of the Organising Committee of the Conferences RANLP (Recent Advances in Natural Language Processing), held biennially in Bulgaria: see <http://lml.bas.bg/ranlp2001> and respective pages for years 2003,-5,-7,-9,-11,-13,-15,-17, -19, as well as <http://ranlp.org/ranlp2021> and <http://ranlp.org/ranlp2023/>. After 2009, the RANLP Proceedings is uploaded in the ACL Anthology (in the USA). After 2007, the RANLP Proceedings is indexed by Scopus and has its own SJR-rank.
- 2002-2013: Member of the Editorial Board of the International Conferences of Conceptual Structures (ICCS) with a series of peer-reviewed Proceedings published by Springer in Lecture Notes on Artificial Intelligence.

Teaching

- 1979- 1984: Teaching Assistant in Discrete Mathematics at the Faculty of Maths and Mechanics, Sofia University (SU) "Kliment Ohridski"
- 1987-1989: Lecturer in the Faculty of Classical and New Philologies, SU "Kliment Ohridski"
- 1997-current: every academic year a one-term course in Natural Language Processing for various M.Sc. programmes in the Faculty of Maths and Informatics, SU "St. Kliment Ohridski"
- 1997- current: supervisor of M.Sc. students in computer science in SU " St. Kliment Ohridski" and Skopje, Macedonia as well as supervisor of Ph.D. students in IICT BAS

Participation in governing structures of IICT and BAS

- December 2006 – October 2018: Department head in IICT BAS and preceding institutes,
- in 2005-2009 and after 2010: member of the Scientific Council of IICT BAS,
- in 2006-2009 and after 2016: member of the General Assembly of BAS,
- in 2006-2009 and 2016-2018: Chair of the General Assembly of IICT researchers,
- February 2017 – October 2018: member of the Governing Council of BAS,
- November 2018 – October 2022: Director of IICT BAS,
- November 2022 – now: Chair of the Scientific Council of IICT-BAS.