

CURRICULUM VITAE

Name, academic position and degree

Roman Zahariev Zahariev, Professor, PhD. Eng.

Affiliation – research organization, department

Bulgarian Academy of Sciences, Institute of Robotics

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Education

Higher education

Academic positions in the last five years

Professor

Main research area and subareas

Robots and manipulators. Research and creation of mechatronic and robotic systems, actuators, and devices with microprocessor control with multifunctional purposes in different directions of human activity for the purposes of industry, energy, and medicine.

Additional research areas and subareas

Research in the field of Standard model of matter. Construction of Magnetic calorimeter implementation at European Centre of Nuclear Research (CERN), Geneva, Switzerland.

Specializations abroad and international collaborations

Switzerland, European Centre of Nuclear Research, CERN, - Altogether over 5 years.

International Collaboration with ETH Zurich in the fields of work at CERN.

International Collaboration with Vienna University of Technology, Institute of Robotics and Manipulators.

JAPAN Kyutech Technology Institute – 2 months;

GREECE Eastern Macedonia and Thrace Institute of Technology (EMaTTech) - three months;

FRANCE, CHU - Grenoble ALPES, France; - 1 month.

MOROCCO - University of Hassan II Casablanca - MOROCCO, 1 month;

CHILE - University of Chile (CEINE) - 1 month;

Scientific awards and membership in scientific societies

Name, used in publications in foreign language: Roman Zahariev

Internet address with list of scientific publications (Researcher ID, Research gate, etc.):

http://sonix.math.bas.bg/bg

Total number of scientific publications: 158

From them with impact factor or impact rang: 16

Number of citations of the scientific publications: 3568

Number of scientific publications in the last five years: 16

From them with impact factor or impact rang: 6

Number of citations of the scientific publications in the last five years: 2753

Selected scientific publications from 2018:

- ➤ Raykov Pl., Valchkova N., Zahariev R.. Analytical Coordinate Transformation for Manipulation when Using Robots to Serve People with Disabilities. International Conference on Electrical, Computer and Energy Technologies (ICECET), Prague, Czech Republic, IEEE, 2022, ISBN:978-166547087-2, DOI:10.1109/ICECET55527.2022.9872603, 1-6.
- ➤ Zahariev R., Valchkova N., Angelov G., Paunski J.. "Design of Mobile Service Robots like Cyber Physical Systems for Pedagogical Rehabilitation in Special Education". Proceedings of the Basque Conference on Cyber-Physical Systems and Artificial Intelligence, Basque Conference on Cyber-Physical Systems and Artificial Intelligence., 2022, DOI: https://doi.org/10.5281/zenodo.6574965, 261-272.
- Zahariev R., Valchkova N., Existing Robotics Technologies for Implementation of Special Education. Research Anthology on Inclusive Practices for Educators and Administrators in Special Education (2 Volumes), IGI - Global, 2022, ISBN:13: 9781668436707; ISBN:10: 1668436701; EISBN:13: 9781668436714, DOI:10.4018/978-1-6684-3670-7.ch042, 1090, 757-774. SJR (Scopus).
- Dimitrova, M., Vrochidou, E., Zahariev, R., Krastev, A., Yaneva, T., Bazinas, C., Blagoeva -Hazarbassanova, E.. Robotic Technology for Inclusive Education: A Cyber-Physical System Approach to Pedagogical Rehabilitation. CompSysTech '20: 21st International Conference on Computer Systems and Technologies '20, ACM, 2020, ISBN:978-1-4503-7768-3, DOI:https://doi.org/10.1145/3407982.3408019, 293-299. SJR (Scopus):0.232.
- ➤ N. Valchkova, Zahariev R.. Optimization of Model Operator for Service Robot, Intended to Service Persons with Disability. TECIS-19" IFAC Conference on International Stability, Technology, and Culture, 26-28 September, Sozopol, Bulgaria, 52, 25, ELSEVIER, IFAC-PapersOnLine, 2020, ISSN: 2405-8963, 174-179. SJR (Scopus).
- ➤ Roman Zahariev, Nina Valchkova, George Angelov, Yasen Paunski. Organization of Control and Collection of Environmental Information of Service Robots for People with Disabilities. Problems of Engineering Cybernetics and Robotics, Vol. 74, BULGARIAN ACADEMY OF SCIENCES, 2020, ISSN:ISSN 2738-7364, DOI:doi 10.7546/ PECR.74.20.01, 3-12.
- Zahariev R., N. Valchkova, H Wagatsuma.. Service Robots for Special Education of Children with Disabilities: Robotized Systems for Social Applications.. Proceedings of the 21st International Conference on Computer Systems and Technologies'20, 2020, DOI:https://doi.acm.org/doi/abs/10.1145/3407982.3408023 Indexed in Scopus., 300-306.
- ➤ Zahariev R., N. Valchkova, G.Angelpv, Paunski Y., Krastev A.. Robots for Help in Pedagogy and Rehabilitation. Pr. of the 20-th International Conference on Computer Systems and Technologies (CompSysTech'19), ACM, New York, NY, USA,, 2019, DOI:doi.org/10.1145/3345252.3345253, 1-7.
- Zahariev R., Valchkova N., Existing Robotics Technologies for implementation of Special Education.. In: M. Dimitrova & H. Wagatsuma (Eds.) Cyber-Physical Systems for Social Applications, IGI-Global Pensylvania, USA, eEditorial Discovery®, 2019, ISBN:2327-3453, DOI:10.4018/978-1-5225-7879-6.ch003, 15, 44-61

E-mail address for registration in the database of the Bulgarian National Science Fund

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Participation in projects in the last five years

Financing organization: Funded under the "Competition for Funding Fundamental

Scientific Research - 2021." from the Scientific Research Fund, Bulgaria.

Contest Type and Year: Project H2020-MSCA

Project number or acronym: SRF-2021 No. KΠ-06-H57/8.

Topic: "METHODOLOGY FOR DETERMINING THE FUNCTIONAL PARAMETERS OF A

MOBILE COLLABORATIVE SERVICE ROBOT ASSISTANT IN HEALTH CARE"

Project manager: Assoc. Prof. Dr. Nina Valchkova

Status of the project: (current)

Financing organization: EU Funded

Contest Type and Year: Project H2020-MSCA

Project number or acronym: RISE-2017 No 777720. CybSPEED

Topic: Existing Robotics Technologies for the implementation of Special Education,

Cyber-Physical Systems for Social Applications

Project manager: Assoc. Prof. Dr. Maya Dimitrova

Status of the project: (completed)

Financing organization: Operational Program "Science and education for smart growth

2014-2020", co-financed by the European Social Fund

Contest type and year: 2017

Project number or acronym: BG05M2OP001-2.002-0001

Topic: Student Practices - Phase 1
Project manager: Acad. Ch. Roumenin.
Status of the project: (completed)

Funding Organization: European Social Fund, Operational Program "Human Resources

Development". (2013-2015)

Contest type and year: 2015

Project number or acronym: BG051P0001-7.0.07-0164-C0001 Topic: Technology for independent living and social inclusion

Project Manager: Acad. Ch. Roumenin. Status of the project: (completed)