

СТРУЧНА БИОГРАФИЈА

Др. Александар Д. Родић, Научни саветник




Новија фотографија

лични подаци

Име, средње слово	Александар, Д.
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Датум рођења	28.10.1960
Место рођења	Београд, Република Србија
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ПРОФЕСИОНАЛНИ ПОДАЦИ

Титула	Доктор техничких наука за област електротехнике
Установа	Институт „Михајло Пупин“ доо. Београд Универзитет у Београду Република Србија
	
Предузеће / Одељење	Институт „Михајло Пупин“, Центар за роботiku
Контакт адреса (улица, број)	Волгина 15
Место, поштански број	Београд, 11060
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ОБРАЗОВАЊЕ, ОБУКЕ, СПЕЦИЈАЛИЗАЦИЈЕ

Дипломирани машински инжењер, Унив. у Београду, 1985
Магистар електротехнике, Универзитет у Београду, 1992
Доктор електротехнике, Универзитет у Београду, 1999

ПРОФЕСИОНАЛНИ ИНТЕРЕС и КОМПЕТЕНТНОСТ

А) основна

- Роботика и интелигентни системи
- Аутоматско управљање и стабилност
- Сложени динамички системи
- Идентификација система, моделирање и симулација
- Вештачка интелигенција и инфроматика
- Машинско пројектовање
- Обновљиви извори енергије

В) посебна

- Сервисни и персонални работи

- Медицински и рехабилитациони роботи
- Биолошки инспирисани системи
- Хуманоидни роботи
- Мобилни роботи и аутономни роботски системи
- Биомеханика и биокибернетика
- Дворучна роботска манипулација
- Кинематика и динамика робота
- Планирање кретања
- Симултанан локализација и мапирање (SLAM)
- Когнитивна и развојна роботика
- Фази логика и системи за подршку одлучивању
- Embedded системи
- Аутономни роботски системи без посаде (земаљски, ваздушни и подводни)
- Мерење и инструментација
- Сензорска аквизиција и фузија података
- Роботска визија
- Систем-интеграција
- Соларна енергија и енергија ветра

ПРОФЕСИОНАЛНО ИСКУСТВО

- **2015** Потпредседник Скупштине Института „Михајло Пупин“ д.о.о. Београд
- **2014** Гостујући професор, ANHUI University of Technology (AHUT), Ma'anshan, China
- **2013** Члан Међународног научног комитета удружења роботичара земаља Алпе-Адриа-Дунавског региона (RAAD – Robotics in Alpe-Adria-Danube Region)
- **2012** Професор на докторским студијама, Универзитет у Београду, Електротехнички факултет у Београду, Профил „Аутоматско управљање, сигнали и системи“
- **2011** Члан Матичног одбора за електронику, телекомуникације и инфромационе технологије, Министратво просвете, науке и технолошког развоја Републике Србије
- **2010** Руководилац Центра за роботску, Институт „Михајло Пупин“ Београд
- **2009** Хонорарни професор, Докторске студије, ДРжавни универзитет у Сегедину, Институт за инфроматику, Лабораторија за роботску, Сегедин, Република Мађарска
- **2004-2013** Гостујући професор, Универзитет у Ревинџону, Висока инжењерска школа, Ревинџон, Република Француска (2004, 2006, 2008, 2009, 2011, 2012, 2013)
- **2009** Академско звање „Научни саветник“, Министратво просвете, науке и технолошког развоја Републике Србије
- **2004** Академско звање „Виши научни сарадник“, Министратво просвете, науке и технолошког развоја Републике Србије
- **2000** Члан Научног већа Института „Михајло Пупин“
- **2000** Академско звање: „Научни сарадник“, Министратво просвете, науке и технолошког развоја Републике Србије
- **1997** Водећи пројектант
- **1987** Истраживач сарадник

НАГРАДЕ и СТИПЕНДИЈЕ

- **2013** Награда „Менаџер године у 2012 у области иновација и примене научних достигнућа у Републици Србији“, специјална годишња награда коју додељује Клуб привредних новинара, Привредна комора Републике Србије
- **2005** Стипендија Alexander von Humboldt Research Fellow, Technical University of

Braunschweig, Institut fuer Angewandte Mechanik, Braunschweig, Germany (3 месеца)

- **2001-2002** Alexander von Humboldt Research Fellow, Technical University of Braunschweig, Institut fuer Verkehrsicherheit und Automatisierungstechnik, Braunschweig, Germany (18 месеци), IV-1-7109-JUG/1071157
- **1998** Специјална годишња југословенска награда за „Најбољу техничку иновацију у категорији истраживача у 1998 години“, Саобраћајни институт ЦИП, Београд
- **1991** Стипендија UNIDO/UNDP Research Fellow, Fraunhofer Institut fuer Produktionsanlagen und Konstruktionstechnik (IPK), Berlin, Germany (1 месец)

ЧЛАНСТВО У ОРГАНИЗАЦИЈАМА, ОРГАНИЗАЦИЈА НАУЧНИХ СКУПОВА, УРЕЂИВАЧКИ И РЕЦЕНЗЕНТСКИ РАД

- Члан Међународног научног комитета RAAD – Robotics in Alpe-Adria-Danube Region, 2013 – и данас
- Члан програмског научног одбора међународне конференција ЕТРАН-а, главни председавајући Секције за роботiku, 2011 – и данас
- Организатор и гљвно-председавајући 2nd International Exploratory Workshop “New Trends in Medical and Service Robotics MESROB 2013”, Belgrade, Institute Mihailo Pupin, July, 2013
- Уредник тематског зборника “New Trends in Medical and Service Robots - Theory and Integrated Applications” published in the Springer monograph series “Mechanisms and Machine Science”, 2013
- Уредник монографског зборника „Contemporary robotics – Challenges and Solutions“, ISBN-978-953-307-038-4, InTech, www.intechweb.org, 2009
- Уредник монографије: „Automation and Control – Theory and Practice“, InTech, www.intechweb.org, ISBN-978-953-307-039-1, 2009
- Члан уређивачког одбора часописа, *International Journal on Advance Robotic Systems, InTech*, Open Access Publisher, ISSN: 1729-8806, 2009. – и данас
- Члан уређивачког одбора, *Journal Robotics*, MDPI AG, Basel, Switzerland, Open Access Journal, ISSN 2218-6581
- Члан уређивачког одбора, „Војно-технички гласник“, Министратво одбране Републике Србије, ISSN: 0042-8469
- Члан уређивачког одбора, „Научно-технички преглед“, Војно-технички Институт у Жаркову, YU ISSN: 1820-0206
- Члан уређивачког одбора, *International Journal of Engineering*, Annals of Faculty of Engineering Hunedoara, ISSN: 1584 – 2665
- Научни рецензент *IEEE Transactions on Automation Science and Engineering*, ISSN: 1545-5955
- Научни рецензент часописа *IEEE Transactions on Systems, Man, and Cybernetics - Part C: Applications and Reviews*, ISSN: 1094-6977
- Научни рецензент часописа *International Journal of Humanoid Robotics (IJHR)*, Print ISSN: 0219-8436, Online ISSN: 1793-6942
- Научни рецензент часописа *Journal of Intelligent and Robotic Systems (JINT)*, Print ISSN: 0921-0296, Online ISSN: 1573-0409
- Научни рецензент часописа *Robotica*, Cambridge University Press, ISSN: 0263-5747, EISSN: 1469-8668
- Научни рецензент часописа *Autonomous Robots*, Springer, ISSN: 0929-5593 (print version), ISSN: 1573-7527 (electronic version)

ИСТРАЖИВАЧКИ ПРОЈЕКТИ

Координирање међународних научних пројеката:

1991 UNIDO/UNDP, “Development of software system for modeling, control and simulation of

	manipulation robots in contact tasks”, Fraunhofer Institute for Production Systems (IPK), Berlin, Germany (coordinator)
2001-2002	Alexander von Humboldt research project, “A Study on Advanced Active Control of Interactive Road Vehicle Dynamics – Theory, Modelling, Control and Simulation” Technical University Braunschweig, Germany, (coordinator)
2005	Alexander von Humboldt research project, „Study of the mechanical impact phenomena and their influence upon dynamic performances of biped locomotion mechanisms – theory, modeling, control and simulation“, Technical University Braunschweig, Germany (coordinator)
2008-2009	Bilateral French-Serbian project “Advanced mathematical methods in solving complex engineering tasks (MATENG)” coordinator, EGIDE-France and Ministry of Science of Republic Serbia (national coordinator)
2011-2012	Bilateral research project between Serbia and Portugal, “Synthesis of Collaborative Behavior Attributes with Service Robots Based on Visually-Motor Human-Machine Interaction (COLBAR)“, Ministry of Education, Science and Technology of Republic Serbia and Ministry of Science of Portugal (national coordinator)
2011-2014	Swiss National Scientific Foundation SNSF IP SCOPES project “Creative Alliance in Robotics Research and Education Focused on Medical and Service Robotics (CARE-robotics)”, Project ID: IZ74Z0_137361/1, SNSF SCOPES IP, Switzerland (national coordinator)
2014-2015	European research and development program HORIZON 2020, Coordination support activity project “Researchers’ night” (Work Package leader)
2013-2015	Serbian-Chinese science & Technology cooperation 2013-2015, “High speed and high precision robots - path planning, dynamics and control (HIGH-SP ROBOTS)”, Institute Mihailo Pupin and University of Anhui, School of Mechanical Engineering, (national coordinator).
2015-2017	Research Group Linkage Program, Alexander von Humboldt Foundation, “Building attributes of artificial emotional intelligence aimed to make robots feel and sociable as humans (Emotionally Intelligent Robots - <i>EIrobots</i>)”, Contract no. 3.4-IP-DEU/112623, University of Kaiserslautern, Institute for informatics, Robotics department, Germany, (national coordinator)
Координирање домаћим истраживачко-развојним пројектима:	
2014-2015	“Развој мобилног соларног електрогенератора за унапређење пољопривредне производње”, Министратво просвете, науке и технолошког развоја Републике Србије (координатор)
2011-2015	“Истраживање и развој амбијентално-интелигентних сервисних робота антропоморфне структуре”, TR-35003, Министратво просвете, науке и технолошког развоја Републике Србије (помоћник координатора, руководилац радног пакета)

2011-2015	“Развој робота као уређаја за помоћ у превазилажењу тешкоћа у развоју деце ометенен у развоју”, III-44008, Министратво просвете, науке и технолошког развоја Републике Србије (руководилац радног пакета)
2013-2015	“Развој биолошки инспирисане роботске руке”, Институт „Михајло Пупин“, (координатор)
2013-2015	„Развој бионичке шаке с више прстију“, Институт „Михајло Пупин“ (координатор)
2014-2016	“Развој даљински управљаног подводног робота за подводну инспекцију и спасилачке акције”, Институт „МИхајло Пупин“, Београд
2014-2015	„Развој даљински управљаног мобилног роботизованог соларног електро-генератора за унапређење пољопривредне производње“, Министратво просвете, образовања и технолошког развоја Републике Србије, број 451-03-2802/2013-16/55
ПОЗНАВАЊЕ ЈЕЗИКА	
A) <i>Матерњи</i> B) <i>Први страни</i> C) <i>Други страни</i> D) <i>Трећи страни</i>	српски енглески (активно служење) немачки (средњи ниво) француски (елементарно знање)
АКАДЕМСКО РАНГИРАЊЕ	
Prof. Dr Aleksandar Rodić, BsME, MsEE, PhDEE	
<i>Published books: 1</i> <i>Chapters in books: 9</i> <i>Journal papers: 34</i> <i>Conference papers: 80</i> <i>Total publications: 124</i> <i>Number of citations: 436 (Scopus, Google scholar, Tompson Reuters, Web of Science)</i> <i>SCI H-index: 11</i> <i>University ranking: 300-400 (according to the Shangai list)</i>	
ИСКУСТВО У НАСТАВИ	
<ul style="list-style-type: none"> • 2001-2002 Основне студије, Technical University of Braunschweig, Germany, EU • 2004-2013 Основне студије, University of La Reunion, France, EU • 2009-2011 Докторски студијски програм, University of Szeged, Szeged, Hungary, EU • 2012- Докторски студијски програм, Назив предмета: Аутономни роботски системи без људске посаде, Електротехнички факултет Универзитета у Београду • 2014- Предавање по позиву, Универзитет технологије у Анхуиу, Кина 	
УРЕДНИШТВО и РЕЦЕНЗИЈЕ	
<ul style="list-style-type: none"> • Editor of the research monograph: “Contemporary robotics – Challenges and Solutions”, ISBN-978-953-307-038-4, InTech, www.intechweb.org, 2009 • Editor of the research monograph: “Automation and Control – Theory and Practice”, InTech, www.intechweb.org, ISBN-978-953-307-039-1, 2009 • Editor of the research monograph: “New Trends in Medical and Service Robots. Theory and Integrated Applications”, Series: Mechanisms and Machine Science, Springer Publishing House, Vol. 16, Pislá, D.; Bleuler, H.; Rodic, A.; Vaida, C.; Pislá, A. (Eds.), ISBN 978-3-319-01591-0, 2013 	

- Editor of the research monograph: "New Trends in Medical and Service Robots. Challenges and Solutions, Series: Mechanisms and Machine Science, Springer Publishing House, Vol. 20, Rodic, A.; Pislá, D.; Bleuler, H.; (Eds.), ISSN: 2211-0984, DOI10.1007/978-3-319-05431-5, 2014
- Reviewer of IEEE Transactions on Automation Science and Engineering
- Reviewer of IEEE Transactions on Systems, Man, and Cybernetics - Part C: Applications and Reviews
- Reviewer of International Journal of Humanoid Robotics (IJHR)
- Reviewer of Robotica, Cambridge University Press
- Reviewer of Autonomous Robots, Springer
- Reviewer of Strojniški vestnik (University of Maribor, Slovenia)
- Reviewer of Scientific Technical Review, VTI, Serbia
- Reviewer of the Arabian Journal for Science and Engineering

BIBLIOGRAPHY

Aleksandar D. Rodić

(Last update, October 2015)

A. Books / Research monographs

- A.1 Rodić, M. Vukobratović, Dynamics, Integrated Control and Stability of Automated Road Vehicles, Research monograph, ibidem-Verlag, Stuttgart, Germany, ISBN: 3-89821-203-3, (http://www.ibidem-verlag.com/epages/61235722.sf/de_DE/?ObjectPath=/Shops/61235722/Products/3-89821-203-3), 214 pages, 2002

B. Chapters in books / monographs / thematic proceedings

- B.1 Rodić, K. Addi, G. Dalleau, “Adaptive Bio-inspired Control of Humanoid Robots – From Human Locomotion to Artificial Biped Gait of High Performences“, Chapter in the book Contemporary Robotics – Challenges and Solutions, In-Tech, www.intechweb.org, ISBN-978-953-307-038-4, pp. 275-300, 2009
- B.2 G. Mester, A. Rodić, “Autonomous Locomotion of Humanoid Robots in Presence of Static and Mobile Obstacles – Trajectory Prediction, Path Planning, Control and Simulation“, Chapter in the book - Studies in Computational Intelligence, Series Ed.: Kacprzyk, Janusz , Towards Intelligent Engineering and Information Technology, Part III Robotics, Volume 243/2009, pp. 279-293, ISBN 978-3-642-03736-8, Library of Congress: 2009933683, DOI 10.1007/978-3-642-03737-5, Springer, 2009.
- B.3 Aleksandar Rodić, Gyula Mester, Ivan Stojković, “Qualitative Evaluation of Flight Controller Performances for Autonomous Quadrotors“, pp. 115-134, Chapter in book: Intelligent Systems: Models and Applications, Endre Pap (Ed.), Topics in Intelligent Engineering and Informatics, Vol. 3, Part. 2, ISSN 2193-9411, e-ISSN 2193-942X, ISBN 978-3-642-33958-5, e-ISBN 978-3-642-33959-2, DOI 10.1007/978-3-642-33959-2_7, Springer, 2012.
- B.4 Aleksandar Rodić, Ivan Stojković, “Building of open structure wheel-based mobile robotic platform“, in Interdisciplinary Mechatronics: Engineering Science and Research Development, *Handbook*, Editors: Prof. Dr. Maki K. Habib, Prof. Dr. J. Paulo Davim, ISTE-Wiley, ISBN: 978-18-4821-418-7, 624 pages, pp. 385-421, London, UK, April 2013
- B.5 Aleksandar Rodić, Branko Miloradović, Svemir Popić, Sofija Spasojević, Branko Karan, „Development of Modular Compliant Anthropomorphic Robot Hand“, In Book: “New Trends in Medical and Service Robots. Theory and Integrated Applications, Series: Mechanisms and Machine Science, Springer Publishing House, Vol. 16, Pisla, D.; Bleuler, H.; Rodic, A.; Vaida, C.; Pisla, A. (Eds.), 2014, VIII, 238 p. 167, ISBN 978-3-319-01591-0, Due: September 30, 2013.
- B.6 Aleksandar Rodić, Khalid Addi, „Mathematical modeling of human affective behavior aimed to design of robot EI-controller“, In Book: “New Trends in Medical and Service Robots. Challenges and Solutions, Series: Mechanisms and Machine Science, Springer Publishing House, Vol. 20, Rodic, A.; Pisla, D.; Bleuler, H.; (Eds.), 384 p., pp. 141-163, 2014, ISSN: 2211-0984, DOI10.1007/978-3-319-05431-5
- B.7 Duško Katić, P. Radulović, S. Spasojević, Ž. Đurović „Advanced pose and gesture recognition algorithms using computational intelligence and Microsoft KINECT sensor“, In Book: “New Trends in Medical and Service Robots. Challenges and Solutions, Series: Mechanisms and Machine Science, Springer Publishing House, Vol. 20, Rodic, A.; Pisla, D.; Bleuler, H.; (Eds.), 384 p., pp. 193-202, 2014, ISSN: 2211-0984, DOI10.1007/978-3-319-05431-5
- B.8 Aleksandar Rodić, Branko Miloradović, Svemir Popić, Đorđe Urukalo, „On developing lightweight robot-arm of anthropomorphic characteristics“, In Book: “New Trends in Medical and Service Robots. Book 3, Series: Mechanisms and Machine Science, Springer Publishing House, Vol. 38, Bleuler, H.; Pisla, D.; Rodic, A.; Bouri, M; Mondada, F; (Eds.), isbn 978-3-319-23831-9, Book ID: 332595_1_En, 2015.
- B.9 M. Tomić, Ch. Vassallo, Ch. Chevallerau, A. Rodić, V. Potkonjak, “Arms motion of a humanoid inspired by human motion”, In Book: “New Trends in Medical and Service Robots. Book 3, Series: Mechanisms

and Machine Science, Springer Publishing House, Vol. 38, Bleuler, H.; Pislá, D.; Rodic, A.; Bouri, M; Mondada, F; (Eds.), isbn 978-3-319-23831-9, Book ID: 332595 _1_En, 2015.

- B.10 A. Rodić, M. Vujović, I. Stevanović, M. Jovanović, „Development of human-centered social robot with embedded personality for elderly care“, In Book: “New Trends in Medical and Service Robots. Book 3, Series: Mechanisms and Machine Science, Springer Publishing House, Vol. ??, P. Wenger,; (Eds.), 2016 (in print).
- B.11. A. Rodić, I. Stevanović, M. Jovanović, Đ. Urukalo, “On Building Remotely Operated Underwater Robot-Explorer with Bi-manual Poly-articular System”, In Book Series: Advances in Intelligent Systems and Computing, Volume 371, Advances in Robot Design and Intelligent Control, Proceedings of the 24th International Conference on Robotics in Alpe-Adria-Danube Region (RAAD), Edt. Theodor Borangiu, ISBN: 978-3-319-21289-0 (Print) 978-3-319-21290-6 (Online), pp. 481-490, 2015

C. Papers in international scientific journals

- C.1 Rodic, M. Vukobratovic, "User-Oriented Software for Modeling, Control Synthesis and Simulation of Robots in Metal Machining Process", *Mechanism and Machine Theory*, Pergamon Press, ISSN: 0094-114X, Vol. 29, No. 3, pp. 455-478, 1994.
- C.2 A. Rodic, M. Vukobratovic, "Contribution to the Controller Design in Tasks of Robotic Deburring", *Mechanism and Machine Theory*, Pergamon Press, ISSN: 0094-114X, Vol. 30, No. 3, pp. 363-382, 1995.
- C.3 M. Vukobratovic, A. Rodic, "Control of Manipulation Robots Interacting with Dynamic Environment: Implementation and Experiments", *IEEE Transaction on Industrial Electronics*, ISSN: 0278/0046, Vol. 42, No. 4, pp. 358-367, August 1995.
- C.4 A. Rodic, M. Vukobratovic, "Contribution to the Integrated Control Synthesis of Road Vehicles", *IEEE Transaction on Control Systems Technology*, ISSN: 1063-6536, Vol. 7, No. 1, pp. 64-78, January 1999.
- C.5 M. Vukobratovic, A. Rodic, Yu. Ekalo, "Impedance Control as a Particular Case of the Unified Approach to the Control of Robots Interacting with a Dynamic Known Environment", *Journal of Intelligent & Robotic Systems, Theory & Applications*, Kluwer Academic Publishers, ISSN: 0921-0296, pp. 191-204, February 1997.
- C.6 M. Vukobratovic, Y. Ekalo, A. Rodic, “How to Apply Hybrid Position/Force Control to Robots Interacting with Dynamic Environment”, *Journal of Intelligent & Robotic Systems, Theory & Applications*, Kluwer Academic Publishers, ISSN: 0921-0296, 2001.
- C.7 M. Vukobratovic, D. Stokic, A. Rodic, M. Vujic, "The Software System for Modeling and Control the Robotized Machining", *Problemi Masinstrojenja i Avtomatizacii* (International Journal Engineering & Automation), ISSN: 0234-6206, Vol. 1, pp. 12-17, Moscow, Russia, 1992.
- C.8 M. Vukobratovic, A. Rodic, "Assembly of Mechanical Parts as a Control Task of Robots Interacting with Dynamic Environment", *Problemi Masinstrojenja i Avtomatizacii* (International Journal Engineering & Automation), ISSN: 0234-6206, pp. 9-19, Vol. 3-4, Moscow, Russia, 1996.
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- F.2 D. Stokic, M. Vukobratovic, Dj. Lekovic, M. Jockovic, D. Hristic, O. Timcenko, N. Đuric, A. Rodic, Z. Ognjanovic, "Program Package for Simulation and Development of Flexible Manufacturing Cells", *Proceedings of IV Yugoslav-Soviet Symposium for Applied Robotics and Flexible Automation*, Novi Sad, 1988.
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- F.18 A. Rodić, "Towards Sustainable Transport and Active Traffic Safety – Synthesis of Hazard Prevention Control System based on Modeling of Cognitive Driver Behavior", UNESCO Program – Education for All by 2015, *11th Education and Training Workshop*, Belgrade, Serbia, 22th – 28th October, 2007
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G. Technical solutions, software products & patents

- G.1 Software system for microprocessor robot controller based on INTEL 8086/8087, project for Russian industry, 1987.
- G.2 FMS – software package for simulation and development of flexible manufacturing systems, VTI Serbia,, 1988.
- G.3 MANSIMED – software package for educational purposes: modeling, simulation and CAD of control of manipulation robots in industry, for Technical faculties in Serbia and IPK Fraunhofer (Berlin, Germany), 1989.
- G.4 Hardware-Software simulator of general purpose air-jet, Military project,, 1989.
- G.5 Control and navigation system (software modules) for simulator of unmanned (pilotless) aircraft, VTI Serbia, 1991.
- G.6 A Toolbox System for Design of Task-Oriented Industrial Robot Controllers, European project, EEC-Contract no. C/1*-CT91-0892 (LNBE), Fraunhofer Institute IPK, Berlin, Germany, 1992.
- G.7 CONMOT – software package for modeling, simulation and CAD of control of manipulation robots in contact industrial tasks (compliant motion), for domestic industry and research centres, 1993.
- G.8 DVL+ Automotive Engineering Toolbox – Advanced software system for modeling, control and simulation of automotive systems with driver-vehicle in the loop, Deutsche Luft und Raumfahrt (DLR), Institute for transportation systems and Technische Universitaet Braunschweig, Braunschweig, Germany, 2005
- G.9 HRSP Humanoid Robot Simulation Platform – Customized software for modeling and simulation of biped locomotion robots (humanoids), Research software delivered to French, Italian and Hungary academic institutions, 2007.
- G.10 MSHUB-3D Customized Software Interface for Enhanced 3D-Sensing, Modeling and Simulation of Human Biomechanics for Use with Marker-Based Capture Motion Systems, University of Reunion, France, 2008.

- G.11 Virtual WRSN – Matlab/Simulink research purpose software for modeling, simulation and control synthesis of wireless robot-sensor networked systems, for academic institutions, 2011
- G.12 MARSS – Micro Aerial Rotorcraft Software Simulator, Matlab/Simulink research purpose software for modeling and simulation of unmanned micro aerial rotorcrafts for academic institutions, 2011/2012.
- G.13 imp-MRSG – Mobile Robotized Solar Generator for Use in Agriculture, Institute Mihajlo Pupin & Regional Development Agency of Bačka, 2013.
- G.14 Pupin hand – Prototype of a modular compliant anthropomorphic hand for service robots and prosthesis, Institute Mihajlo Pupin, 2013.
- G.15 RECIPILET – multi-media collector of ecologic waste, OCTOPUS – Organization for support of civil society, December 2013

H. Workshops, Tutorials

- H.1 Aleksandar Rodić, Gyula Mester, "Remotely Controlled Ground-Aerial Robot-Sensor Network for 3D Environmental Surveillance and Monitoring", TAMOP 422 Workshop, Szeged, Hungary, 2011.
- H.2 Aleksandar Rodić, Gyula Mester, "Sensor-Based Navigation, Motion Planning and Control of Autonomous Indoor Ambient Adaptive Wheel-Based Robots in Environments with Contingency Risks", TAMOP 422 Workshop, Budapest, Hungary, 2011.
- H.3 Aleksandar Rodić, Gyula Mester, "Virtual WRSN – Modeling and Simulation of Wireless Robot-Sensor Networked Systems", TAMOP 422 Workshop, University of Szeged, Szeged, Hungary, 2010.
- H.4 Aleksandar Rodić, Gyula Mester, "Autonomous Locomotion of Humanoid Robots in Presence of Mobile and Immobile Obstacles - Path Planning, Trajectory Prediction, Control and Simulation", TAMOP 422 Workshop, University of Szeged, Szeged, Hungary, 2010.
- H.5 Gyula Mester, Aleksandar Rodic, "Autonomous Locomotion of Humanoid Robots in Presence of Mobile and Immobile Obstacles", Budapest Tech, Jubilee Conference, Budapest, Hungary, 2009.
- H.6 Aleksandar Rodić, "New Frontiers in Service Robotics", The 1st International Exploratory Workshop on "New Trends in Medical and Service Robotics (MESROB 2012)", TU Cluj-Napoca, Romania, June 2012.
- H.7 Aleksandar Rodić, "Building of Artificial Emotional and Social Behavior Attributes with Service Robots", The 2nd International Exploratory Workshop on "New Trends in Medical and Service Robotics (MESROB 2013)", Institute Mihajlo Pupin, Serbia, July 2013.
- H.8 Aleksandar Rodić, "Developing a lightweight robot-arm of anthropomorphic characteristics", The 3rd International Exploratory Workshop on "New Trends in Medical and Service Robotics (MESROB 2014)", EPFL, Lausanne, Switzerland, July, 10th-11th, 2014.

I. Plenary lectures and Invited lectures

- I.1 A. Rodić, , "Building attributes of artificial affective and social behavior in robots", The 17th International multiconference Information Society (IS 2014), Institut "Jožef Štefan", Ljubljana, Slovenia, October, 8th, 2014

- I.2 A. Rodić, “Cognitive robots of human character”, ANHUI University of Technology (AHUT), Ma’anshan, Anhui, China, September, 29th, 2014
- I.3 A. Rodić, “Cognitive robots of human character”On developing lightweight robot-arm of anthropomorphic characteristics, ANHUI University of Technology (AHUT), Ma’anshan, Anhui, China, September, 25th, 2014