

Nastavno-naučnom veću Elektrotehničkog fakulteta u Beogradu

Na 787. sednici Izbornog i Nastavno-naučnog veća od 23.06.2015. godine, imenovani smo za članove Komisije za izbor kandidata Ljubinka Kevca, diplomiranog inženjera - mastera elektrotehnike i računarstva, u zvanje istraživač-saradnik. Proučili smo prispelu dokumentaciju i čast nam je da Izbornom veću podnesemo sledeći

IZVEŠTAJ

1. Biografski podaci

Ljubinko Kevac rođen je 1987. godine u Ključu, Republika Bosna i Hercegovina. Osnovnu školu i Srednju tehničku školu je završio u Bijeljini, Republika Bosna i Hercegovina. Osnovne studije na Elektrotehničkom fakultetu, Univerziteta u Beogradu, upisao je 2006. godine. Stručnu praksu, trajanja tri meseca u okviru osnovnih studija, odradio je leta 2010. u Institutu za Tehnologije u Manipalu, Republika Indija. Diplomirao je 2010. godine na Odseku za signale i sisteme. Tema diplomskog rada bila je "Modeliranje i simulacija MEMS senzora pritiska", a mentor prof. dr Srbijanka Turajlić. Master studijama upisao je 2010. godine na Elektrotehničkom fakultetu, Univerziteta u Beogradu i nakon godinu dana ih uspešno završio, izradom master rada "Analiza metoda za vođenje mobilnih vozila i izbegavanje prepreka", gde mu je mentor bio prof. dr Željko Đurović.

Po završetku master studija počinje sa volontiranjem u Institutu Mihajlo Pupin u Beogradu u sekciji za Robotiku. Početkom 2012. godine upisuje doktorske studije na Elektrotehničkom fakultetu, Univerziteta u Beogradu i zapošljava se u Inovacionom centru Elektrotehničkog fakulteta, Univerziteta u Beogradu.

Ljubinko Kevac je položio svih deset ispita na doktorskim studijama sa prosečnom ocenom 9.8. Trenutno radi na izradi doktorske disertacije, kao finalnog rezultata višegodišnjih istraživanja i saradnje sa kolegama iz Instituta Mihajlo Pupin, a posebno dr Mirjanom Filipović, kao njegovim komentatorom.

2. Spisak objavljenih rezultata

Ljubinko Kevac objavio je dva rada u međunarodnim naučnim časopisima, jedan u domaćem časopisu i 21 rad na međunarodnim naučnim konferencijama, jedan rad u apstraktu, pet radova na domaćim konferencijama i to:

Kategorija M21

- M21.1. Mirjana Filipovic, Ana Djuric, **Ljubinko Kevac**, The significance of adopted Lagrange principle of virtual work used for modeling aerial robots, Appl. Math. Modelling, vol 39, no. 7, pp. 1804-1822, April 2015, ISSN 0307-904X, DOI: 10.1016/j.apm.2014.09.019, IF=2.158

Kategorija M23

- M23.1. M. Filipovic, A. Djuric and **Lj. Kevac**, The rigid S-type cable-suspended parallel robot design, modelling and analysis. Robotica, Available on CJO 2014, doi:10.1017/S0263574714002677

Kategorija M33

- M33.1. **Lj. Kevac**, M. Filipovic, "Trajectory tracking algorithm for elastic robotic mechanism," 2012 SISY IEEE 10th Jubilee International Symposium on Intelligent Systems and Informatics, Subotica, Serbia, pp. 221-225, 20-22 September 2012, ISBN 978-1-4673-4751-8, <http://conf.uni-obuda.hu/sisy2012/>.
- M33.2. M. Filipovic, **Lj. Kevac**, B. Reljin, "Comparative analysis of two configurations of aerial robot," 2012 SISY IEEE 10th Jubilee International Symposium on Intelligent Systems and Informatics, Subotica, Serbia, Obuda University, Hungary (September 20-22, 2012), pp. 211-216, ISBN 978-1-4673-4751-8, <http://conf.uni-obuda.hu/sisy2012/>
- M33.3. M. Filipovic, A. Djuric, **Lj. Kevac**, "Contribution to the modelling of Cable-suspended Parallel Robot hanged on the four points", IROS 2012: IEEE/RSJ International Conference on Intelligent Robots and Systems, Vilamoura, Institute for System and Robotics, University of Coimbra, Portugal (October 7-12, 2012), pp. 3526-3531. ISBN 978-1-4673-1735-1. <http://www.iros2012.org/site/>
- M33.4. M. Filipovic, **Lj. Kevac**, A. Djuric, "Future directions for implementation of aerial robot", 10th International Symposium on Electronics and Telecommunications, ISETC 2012, Tenth Edition, Politehnica University of Timisoara, Timisoara, Romania (November 15-16, 2012), ISBN 978-1-4673-1175-5, pp. 91-94, <http://www.etc.upt.ro/isetc2012/home.php>

- M33.5. **Lj. Kevac**, S. Mitrovic, Z. Djurovic, A. Rodic, "Mobile robot control based on principles of Electrostatics", 10th International Symposium on Electronics and Telecommunications, ISETC 2012, Tenth Edition, Timisoara, Romania, ISBN 978-1-4673-1176-2/12, pp. 87-90, November 15-16, 2012, <http://www.etc.upt.ro/isetc2012/home.php>
- M33.6. M. Filipovic, A. Djuric, **Lj. Kevac**, "The mathematical model of aerial robot in purpose increasing of its autonomy", 20th Telecommunications Forum TELFOR 2012, Telecommunications Society, Belgrade, Serbia (November 20-22, 2012), pp. 1575-1578. ISBN 978-1-4673-2982-8, <http://www.telfor.rs>
- M33.7. M. Strbac, **Lj. Kevac**, I. Popovic, N. Jovicic, "Wireless camera network system: test of concept", 20th Telecommunications Forum TELFOR 2012, 20-22 November 2012, Belgrade, Serbia, ISBN 978-4673-2984-2/12, pp. 1001-1004, <http://www.telfor.rs>
- M33.8. Mirjana Filipovic, **Ljubinko Kevac**, Ana Djuric, Milica Vujovic, "The importance of the development and application areas of different structures of Cable-suspended Parallel Robot – CPR systems," Proceedings of 2st International Conference IcETran Conference, Silver Lake, Serbia, June 8 – 11, 2015, ROI3.6.
- M33.9. **Ljubinko Kevac**, Svetislav Ćirić, Miloš Jovanović, Aleksandar Rodić, "REMOTE CONTROL AND DATA ACQUISITION OF ROBOTIC MECHANISMS," Proceedings of 2nd International Conference IcETran Conference, Silver Lake, Serbia, June 8 -- 11, 2015, ROI1.6.
- M33.10. **Ljubinko Kevac**, Mirjana Filipovic, "ANALYSIS OF THE PERFORMANCE OF CPR SYSTEM WITH CHANGEABLE MASSES OF WINCHES AND ROPES" Proceedings of 5th International Congress of Serbian Society of Mechanics, Arandjelovac, Serbia, June 15-17, 2015, M2b
- M33.11. **Lj. Kevac**, A. Đurić, M. Filipović, "Relation between Cable-suspended Parallel Robot and classic robotic structure", 4th International Congress of Serbian Society of Mechanics, 4-7th June, 2013, Vrnjačka Banja, Serbia, pp. 955-960. ISBN 978-86-909973-5-0. <http://www.ssm.org.rs>
- M33.12. Đurić, M. Filipović, **Lj. Kevac**, "Graphical Representation of the Significant 6R KUKA Robots Spaces" Sisy 2013, IEEE 11th International Symposium on Intelligent Systems and Informatics, September 26-28, 2013, Subotica, Serbia, pp. 221-226, ISBN 978-1-4799-0305-4/13/\$31, <http://conf.uni-obuda.hu/sisy2013>
- M33.13. **Lj. Kevac**, A. Rodic, M. Filipovic, "Control of two-axis solar tracker for increasing the autonomy of mobile robot", Second International Conference on Renewable Electrical Power Sources, Oct 16-18, 2013, Belgrade, Serbia. ISBN 978-86-81505-68-7.
- M33.14. Djuric, J. Urbanic, M. Filipovic, **Lj. Kevac**, "Effective Work Region Visualization for Serial 6 DOF Robots", CARV 2013 – 5th International Conference on Changeable, Agile, Reconfigurable and Virtual Production, Oct 6-9, 2013, Munich, Germany, pp. 207-212, DOI: 10.1007/978-3-319-02054-9_36, http://link.springer.com/chapter/10.1007/978-3-319-02054-9_36
- M33.15. Djuric, M. Filipovic, **Lj. Kevac**, J. Urbanic, "Singularity Analysis for a 6 DOF Family of Robots", CARV 2013 – 5th International Conference on Changeable, Agile, Reconfigurable and Virtual Production, Oct 6-9, 2013, Munich, Germany, pp. 201-206, DOI: 10.1007/978-3-319-02054-9_36, http://link.springer.com/chapter/10.1007/978-3-319-02054-9_36
- M33.16. Mirjana Filipovic, Ana Djuric, **Ljubinko Kevac**, "Complexity of the elastic S-type Cable-suspended Parallel Robot," Proceedings of 1st International Conference IcETran Conference, Vrnjacka Banja, Serbia, June 2 – 5, 2014, ROI3.3, ISBN 978-86-80509-70-9, <http://etran.etf.rs/>
- M33.17. **Ljubinko Kevac**, Mirjana Filipovic, Ana Djuric, "The comparison between the real and the scaled model of the CPR system," Proceedings of 1st International Conference IcETran Conference, Vrnjacka Banja, Serbia, June 2 – 5, 2014, ROI3.3, ISBN 978-86-80509-70-9, <http://etran.etf.rs/>
- M33.18. **Ljubinko Kevac**, Mirjana Filipovic, Ana Djuric, "The dynamic response analysis of a 2-DOF robotic mechanism for a complex trajectory" International Symposium on Stability, Vibration, and Control of Machines and Structures, SVCS2014, July 3–5, 2014, pp. 270-284, Belgrade, Serbia, ISBN 978-80-8075-655-0
- M33.19. Mirjana Filipović, Ana Djuric, **Ljubinko Kevac**, "The choice of generalized coordinates for elastic robotic systems (industrial, humanoid and CPR)," International Symposium on Stability, Vibration, and Control of Machines and Structures, SVCS2014, July 3–5, 2014, pp. 249-269, Belgrade, Serbia, ISBN 978-80-8075-655-0
- M33.20. **Ljubinko Kevac**, Mirjana Filipovic, Ana Djuric, "The complex motion of Cable-suspended parallel robot under the influence of the disturbance", ENOC 2014, July 6 – 11, 2014, Vienna, Austria, ISBN 978-3-200-03433-4
- M33.21. Mirjana Filipović, Ana Djuric, **Ljubinko Kevac**, Željko Despotović, "The elastic F-type Cable-suspended Parallel Robot in the service of parents", International Workshop and Summer School on Medical and Service Robotics, July 10 – 12, 2014, EPFL Lausanne, Switzerland

Kategorija M34

- M34.1. **Lj. Kevac**, M. Filipović, "Precise trajectory tracking of robotic mechanism", Symposium Non-linear Dynamics with Multi and Interdisciplinary Applications (SNDMIA 2012), Belgrade, Serbian Scientific Society, 01-05 October 2012. Booklet of Abstracts, Symposium Venue at Mathematical Institute SANU (Eight Serbian Symposium in area of Non-linear Sciences). <http://afrodita.rcub.bg.ac.rs/~nds/209-Booklet%20of%20Abstracts%20%20Nonlinear%20Dynamics%20PR%20ON144002.pdf>

Kategorija M51

- M51.1. Mirjana Filipovic, Ana Djuric, **Ljubinko Kevac**, "The methodology for developing the kinematic model of selected CPR-A system as a necessity for the development of a dynamic model", Journal of Applied Engineering Science, ISSN 1451-4117, 2013, www.engineeringscience.rs

Kategorija M63

- M63.1. **Lj. Kevac**, M. Filipovic, "Application of FUZZY logic controller to the control of robotic mechanism", Proceedings of 56th ETRAN Conference, Zlatibor, June 11-14, 2012, RO1.7, ISBN 978-86-80509-67-9, <http://etran.etf.rs/>
- M63.2. M. Filipović, **L. Kevac**, „The Importance of procedure of form a mathematical model of aerial robot,” HIPNEM 2012, KGH, Belgrade, October 18 2012. ISBN 978-86-81505-64-9, <http://www.smeits.rs>
- M63.3. **Lj. Kevac**, M. Filipović, „Aplication of fuzzy logic controller to the control of robotic mechanism with 6 DOF,” HIPNEM 2012, KGH, Belgrade, October 18 2012. ISBN 978-86-81505-64-9, <http://www.smeits.rs>
- M63.4. **Lj. Kevac**, M. Filipović, A. Đurić, I. Kršenković, "Analysis of influence of the motor choice on trajectory tracking of Cable-suspended Parallel Robot", Proceedings of 56th ETRAN Conference, Zlatibor, June 03-06, 2013, RO2.5, ISBN 978-86-80509-68-6, <http://etran.etf.rs/>.
- M63.5. M. Filipović, **Lj. Kevac**, A. Đurić, "Synthesis and analysis of two configurations of Cable suspended Parallel Robot", Proceedings of 56th ETRAN Conference, Zlatibor, June 03-06, 2013, RO2.4, ISBN 978-86-80509-68-6, <http://etran.etf.rs/>

Ljubinko Kevac učestvuje u izvođenju jednog projekta i to:

1. Dinamika hibridnih sistema složenih struktura, Ministarstvo nauke, prosvete i tehnološkog razvoja Republike Srbije, OI-174001, 2012-2015.

3. Zaključak i predlog

Na osnovu prethodno izloženih elemenata naučno-istraživačkog rada, Komisija konstatuje da kandidat Ljubinko Kevac ispunjava sve zakonske, formalne i suštinske uslove za izbor u zvanje istraživač-saradnik. Njegov dosadašnji naučno-stručni rad ukazuje da se radi o kvalitetnom istraživaču i Komisija ima zadovoljstvo da predloži Izbornom veću Elektrotehničkog fakulteta da izabere Ljubinka Kevca u zvanje istraživač-saradnik.

Beograd, 03.07.2015. god.

ČLANOVI KOMISIJE:



1. dr Aleksandar Rakić, docent
Elektrotehnički fakultet u Beogradu



2. dr Veljko Potkonjak, redovni profesor
Elektrotehnički fakultet u Beogradu



3. dr Mirjana Filipović, viši naučni saradnik
Institut Mihajlo Pupin, Beograd