УНИВЕРЗИТЕТ У НОВОМ САДУ
НАЗИВ ФАКУЛТЕТА

ИЗВЕШТАЈ О ПРИЈАВЉЕНИМ КАНДИДАТИМА НА КОНКУРС ЗА ИЗБОР У ЗВАЊЕ ГОСТУЈУЋЕГ НАСТАВНИКА УНИВЕРЗИТЕТА

I. ПОДАЦИ О КОНКУРСУ, КОМИСИЈИ И КАНДИДАТИМА

II. Датум и место објављивања конкурса:

1. Број наставника који се бира, са назнаком звања и назив уже научне области за коју се расписује конкурс:
   Један наставник за УНО Аутоматика и управљање система.
2. Састав комисије са назнаком имена и презимена сваког члана, звања назива уже научне области за коју је изабран у звање, датум избора у звање и установа у којој је члан комисије запослен:
   - др **Зоран Д. Јеличић**, ред. професор, ФТН Нови Сад, УНО: аутоматика и управљање системима, *председник комисије*
   - др **Бранко Ковачевић**, ред. професор, ЕТФ Београд, УНО: аутоматика и управљање системима
   - др **Филип Кулић**, ред. професор, ФТН Нови Сад, УНО: аутоматика и управљање системима
   - др **Никола Јорговановић**, ред. професор, ФТН Нови Сад, УНО: аутоматика и управљање системима
   - др **Александар Ердељан**, ред. професор, ФТН Нови Сад, УНО: аутоматика и управљање системима
3. Пријављени кандидати:
   Душан Стипановић

III. БИОГРАФСКИ ПОДАЦИ О КАНДИДАТИМА

1. Име, једног родитеља и презиме:
   Душан (Милан) Стипановић
2. Звање: Profesor
   Редовни професор
3. Датум и место рођења, адреса:
   23. 8. 1971, Земун, Београд
4. Садашње запослење, професионални статус, установа или предузеће:
   Full Profesor, University of Illinois at Urbana-Champaign
5. Година уписа и завршетка основних студија:
   1989 - 1994
6. Студијска група, факултет, универзитет и успех на основним студијама:
   Одсек за Аутоматику. Електротехнички факултет, Универзитет у Београду. Просек: 9.28
7. Година уписа и завршетка специјалистичких, односно магистарских студија:
   1994 - 1996
8. Студијска група, факултет, универзитет и успех на специјалистичким, односно магистарским студијама:
   Department of Electrical Engineering, Santa Clara University, 4.0 GPA
9. Наслов специјалистичког рада, односно магистарске тезе:

Stability and Positivity of Multi-Variable Polynomials

10. Наслов докторске дисертације:
    Stability and Stabilization of Nonlinear Discontinuous Systems
11. Факултет, универзитет и година одбране докторске дисертације:
    Department of Electrical Engineering, Santa Clara University, Santa Clara, California, USA, 2000.
12. Место и трајање специјализација и студијских боравака у иностранству:
    Постдокторска специјализација: Stanford University, 2001-2004
13. Знање светских језика:
    Енглески (говори, чита и пише течно)
    Немачки (основни ниво знања)

14. Професионална оријентација (област, ужа област и уска оријентација):
    Стабилност и стабилизација динамичких система. Диференцијалне игре. Децентрализовано управљање и естимација. Робусно управљање и теорија одлучивања.

IV. КРЕТАЊЕ У ПРОФЕСИОНАЛНОМ РАДУ

1. Установа, факултет, универзитет или фирма, трајање запослења и звање (навести сва):

2017-данас	**Professor (редовни професор)** *Department of Industrial and Enterprise Systems Engineering, Coordinated Science Laboratory and Information Trust Institute, University of Illinois at Urbana-Champaign, Illinois, USA.*
2010-2017	**Associate Professor (ванредни професор)** *Department of Industrial and Enterprise Systems Engineering, Coordinated Science Laboratory and Information Trust Institute, University of Illinois at Urbana-Champaign, Illinois, USA.*
2004-2010	**Assistant Professor (доцент)** *Department of Industrial and Enterprise Systems Engineering and the Coordinated Science Laboratory, University of Illinois at Urbana-Champaign, Illinois, USA.*
2001-2004	**Research Associate (истраживач)** *Hybrid Systems Laboratory, Department of Aeronautics and Astronautics, Stanford University, California, USA.*
1998-2001	**Adjunct Lecturer and Research Associate (предавач и истраживач)** *Department of Electrical Engineering, Santa Clara University, California, USA.*

V. ЧЛАНСТВО У СТРУЧНИМ И НАУЧНИМ АСОЦИЈАЦИЈАМА:

Кандидат је члан следећих струковних и научних асоцијација:

- **IEEE**
- *American Institute of Aeronautics and Astronautics* (**AIAA**)
- *International Society of Dynamic Games* (**ISDG**)

VI. НАСТАВНИ РАД:

а) **Претходни наставни рад** (пре избора у звање наставника):

1. Курсеви наставних предмета, називи година студија и фонд часова:

2. Педагошко искуство:

3. Реизборност у звање асистента (од.до. број): -

4. Одржавање наставе под менторством (обим ангажовања у часовима/семестру, на предмету, са фондом часова): -

b) **Садашњи наставни рад** (за избор у виша наставна звања – ванредни професор и редовни професор)

1. Назив предмета, година студија и фонд часова на основним, односно специјалистичким, магистарским и докторским студијама.
Кандидат је држао следеће предмете на основним студијама у оквиру своје матичне институције (*University of Illinois at Urbana-Champaign, Illinois, USA*):

- **Digital Control Systems** (SE 420 бечелор ниво студија)
- **Analysis of Nonlinear Systems** (SE 520 мастер/докторски ниво студија)
- **Control of Complex Systems** (SE 525 мастер/докторски ниво студија)

Кандидат такође држи следеће предмете на Електротехничком факултету Универзитета у Београду, где је такође биран у звање гостујућег професора:

- **Анализа сложених система** (мастер ниво студија)
- **Управљање сложеним системима** (докторски ниво студија)

2. Увођење нових метода у наставном процесу

3. Руковођење – менторство дипломских радова (број радова)
Кандидат је руководио израдом већег броја дипломских и мастер радова (око 20) сви из области управљања динамичким системима.
4. Руковођење – менторство, специјалистичких радова и магистарских теза (име и презиме студента, ужа научна област и наслов рада):

5. Руковођење – менторство докторских дисертација (име и презиме докторанта, ужа научна област и наслов дисертације):

- **Peter Hokayem**: RELIABLE CONTROL OF MULTI-AGENT SYSTEMS, odsek za elektrotehniku, dinamicki sistemi, 2007
- **Silvia Mastellone**: Interaction and Configuration Control for Networks of Dynamical Systems, odsek za sisteme i dinamicki sistemi, 2008
- **Juan Mejía**: SAFE CONTROL AND COORDINATION OF MULTIPLE AUTONOMOUC VEHICLES, odsek za sisteme i dinamicki sistemi, 2009
- **Miloš S. Stanković**: CONTROL AND ESTIMATION ALGORITHMS FOR MULTIPLE-AGENT SYSTEMS, odsek za sisteme i dinamicki sistemi, 2009
- **Chad Burns**: HUMAN AND AUTOMATIC CONTROL INTERACTION WITH A REMOTELY PILOTED VEHICLE, odsek za masinstvo i dinamicki sistemi, 2011
- **Erick Rodríguez-Seda**: CONTROL OF NETWORKED LAGRANGIAN SYSTEMS WITH DELAYS, 2011
- **Kunal Srivastava**: DISTRIBUTED OPTIMIZATION WITH APPLICATIONS TO SENSOR NETWORKS AND MACHINE LEARNING, odsek za sisteme i dinamicki sistemi, 2011

- **Christopher Valicka**: COOPERATIVE AVOIDANCE CONTROL FOR UNMANNED AERIAL VEHICLES, odsek za sisteme i dinamicki sistemi, 2013
- **Gokhan Atinc**: SAFE AND RELIABLE DYNAMIC COVERAGE CONTROL FOR MULTI-AGENT SYSTEMS, odsek za masinstvo i dinamicki sistemi, 2014
- **Shankar Deka**: RELIABLE CONTROL OF SURGICAL ROBOTS AND STABILIZATION OF LONG SHORT-TERM MEMORY NEURAL NETWORKS, odsek za sisteme i dinamicki sistemi, 2019

6. Извођење наставе на универзитетима ван земље:
   2004 – данас: **University of Illinois at Urbana-Champaign**
7. Учешће у комисијама за одбрану дипломских и специјалистичких радова, магистарских теза и докторских дисертација:
   Кандидат је био члан 20 комисија за одбрану докторских дисертација.

в)**Награде и признања универзитета, педагошких и научних асоцијација**

- 2006 **Excellence in Teaching Award**, General Engineering Department, University of Illinois.
- 2014 **Sharp Outstanding Teaching Award**, ISE Department, University of Illinois.
- 2016 **Arthur Davis Faculty Scholar Award**, University of Illinois.

г)**Уџбеници** (наслов, аутори, година издања, издавач):

д)**Друга дидактичка средства** (приручници, скрипте и сл. наслов, аутор, година издања, издавач):

VI**ПРЕГЛЕД И МИШЉЕЊЕ О ДОСАДАШЊЕМ НАУЧНОМ ОДНОСНО УМЕТНИЧКОМ РАДУ**

1. Научне књиге (оригинални наслов, аутори, година издања и издавач):

2. Монографије, посебна поглавља у научним књигама (наслов, аутори, година издања и издавач):

B1. I. Hwang, D. M. Stipanović, and C. J. Tomlin. Polytopic Approximations of Reachable Sets applied to Linear Dynamic Games and to a Class of Nonlinear Systems, in *Advances in Control, Communication Networks, and Transportation Systems: In Honor of Pravin Varaiya*, E.H. Abed (Editor), Systems and Control: Foundations and Applications Series, Birkhäuser, Boston, 2005, pp. 3-19.

B2. D. D. Šiljak and D. M. Stipanović. Stability of Two-Variable Polynomials via Positivity, in *Positive Polynomials in Control*, Series: Lecture Notes in Control and Information Sciences, Vol. 312, D. Henrion and A. Garulli (Editors), 2005, pp. 165-177.

B3. A. Jovičić and D. M. Stipanović. Parametric Adaptive Identification and Kalman Filter, *Wiley Encyclopedia of Biomedical Engineering*, April 2006, pp. 2682-2686.

B4. A. Jovičić and D. M. Stipanović. State-Space Methods, *Wiley Encyclopedia of Biomedical Engineering*, April 2006, pp. 3329-3333.

B5. K. Srivastava and D. M. Stipanović, Stochastic Optimal Control Formulations of Decision Problems, *Wiley Encyclopedia of Operations Research and Management Science*, June 2010, pp. 1-10.

B6. M. S. Stanković, D. M. Stipanović, and S. S. Stanković. Consensus Based Multi-Agent Control Algorithms, in *Efficient Modeling and Control of Large-Scale Systems*, J. Mohammadpour and K. M. Grigoriadis (Editors), Springer, New York, 2010, pp. 197-218.

B7. D. M. Stipanović, C. J. Tomlin, and C. Valicka. Collision Free Coverage Control with Multiple Agents, in *Robot Motion and Control 2011*, K. R. Kozlowski (Editor), Springer-Verlag, London, 2012, pp. 259-272.

B8. K. Srivastava, A. Nedić, and D. M. Stipanović. Distributed Bregman-Distance Algorithms for Min-Max Optimization, in *Agent-Based Optimization*, I. Czarnowski, P. Jedrzejowicz, and J. Kacprzyk (Editors), Springer, London-New York , 2013, pp. 143-174.

B9. E. J. Rodríguez-Seda and D. M. Stipanović. Guaranteed Collision Avoidance with Discrete Observations and Limited Actuation," in *Advances in Intelligent Vehicles*, Y. Chen and L. Li (Eds.), Academic Press, 2014, pp. 89-110.

B10. D. Panagou, D. M. Stipanović, and P. G. Voulgaris. Distributed Control of Robot Swarms: A Lyapunov-Like Barrier Functions Approach, *Handbook of Research on Design, Control, and Modeling of Swarm Robotics*, Y. Tan (Ed), IGI Global, 2016, pp. 115-144.

B11. A. E. Abbas and D. M. Stipanović. Achieving Multiple Objectives with Limited Resources Using Utility Theory and Control Theory, *Improving Homeland Security Decisions*, edited by Ali Abbas, Milind Tambe, and Detlof von Winterfeldt, Cambridge University Press, 2017, pp. 427-444.

3. Референце међународног нивоа (публикације у међународним часописима, међународне изложбе и уметнички наступи):

J1. M. R. Mataušek and D. M. Stipanović. A New Approach to Nonlinear Control System Design, *Journal of Automatic Control* **5** (1994), pp. 31-42.

J2. M. R. Mataušek and D. M. Stipanović. Modified Nonlinear Internal Model Control, *Control and Intelligent Systems* **26** (1998), pp. 57-63.

J3. D. D. Šiljak and D. M. Stipanović. Robust *D*-stability via positivity, *Automatica* **35** (1999), pp. 1477-1484.

J4. D. M. Stipanović and D. D. Šiljak. Stability of polytopic systems *via* convex *M*-matrices and parameter-dependent Liapunov functions, *Nonlinear Analysis* **40** (2000), pp. 589-609.

J5. D. M. Stipanović and D. D. Šiljak. Jacobi and Gauss-Seidel Iterations for Polytopic Systems: Convergence *via* convex *M*-matrices, *Reliable Computing* **6** (2000), pp. 123-137.

J6. D. D. Šiljak and D. M. Stipanović. Robust Stabilization of Nonlinear Systems: The LMI Approach, *Mathematical Problems in Engineering* **6** (2000), pp. 461-493.

J7. D. M. Stipanović and D. D. Šiljak. Robust stability and stabilization of discrete-time nonlinear systems: The LMI approach, *International Journal of Control* **74** (2001), pp. 873-879.

J8. D. M. Stipanović and D. D. Šiljak. SPR Criteria for Uncertain Rational Functions and Matrices Via Polynomial Positivity and Bernstein's Expansion, *IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications* **48** (2001), pp. 1366-1369.

J9. D. M. Stipanović and D. D. Šiljak. Connective Stability of Discontinuous Dynamic Systems, *Journal of Optimization Theory and Applications* **115**, No. 3 (2002), pp. 711-726.

J10. D. D. Šiljak, D. M. Stipanović, and A. I. Zečević. Robust Decentralized Turbine/Governor Control Using Linear Matrix Inequalities, *IEEE Transactions on Power Systems* **17**, No. 3 (2002), pp. 715-722.

J11. D. M. Stipanović, G. İnalhan, R. Teo, and C. J. Tomlin. Decentralized Overlapping Control of a Formation of Unmanned Aerial Vehicles, *Automatica* **40** (2004), pp.

1285-1296.

J12. D. M. Stipanović, I. Hwang, and C. J. Tomlin. Computation of an Over-Approximation of the Backward Reachable Set using Subsystem Level Set Functions, *Dynamics of Continuous, Discrete and Impulsive Systems, Series* **A**: *Mathematical Analysis* **11** (2004), pp. 399-411.

J13. D. M. Stipanović, Sriram, and C. J. Tomlin. Multi-Agent Avoidance Control using an *M*-Matrix Property, *Electronic Journal of Linear Algebra* **12** (2005), pp. 64-72.

J14. S. S. Stanković, D. M. Stipanović, and D. D. Šiljak. Decentralized Dynamic Output Feedback for Robust Stabilization of a Class of Nonlinear Interconnected Systems, *Automatica* **43** (2007), pp. 861-867.

J15. D. M. Stipanović, P. F. Hokayem, M. W. Spong, and D. D. Šiljak. Avoidance Control for Multi-Agent Systems, *ASME Journal of Dynamic Systems, Measurement, and Control* **129** (2007), pp. 699-707, special issue on "Multi-Agent Systems."

J16. I. I. Hussein and D. M. Stipanović. Effective Coverage Control for Mobile Sensor Networks with Guaranteed Collision Avoidance, *IEEE Transactions on Control Systems Technology* **15** (2007), pp. 642-657.

J17. S. Mastellone, D. M. Stipanović, C. Graunke, K. Intlekofer, and M. W. Spong. Formation Control and Collision Avoidance for Multi-Agent Nonholonomic Systems: Theory and Experiments, *International Journal of Robotics Research* **13** (2008), pp. 107-126.

J18. J. S. Mejía and D. M. Stipanović. Computational Receding Horizon Approach to Safe Trajectory Tracking, *Integrated Computer-Aided Engineering* **15** (2008), pp. 149-161.

J19. D. M. Stipanović, A. Melikyan, and N. Hovakimyan. Some Sufficient Conditions for Multi-Player Pursuit-Evasion Games with Continuous and Discrete Observations, *Annals of the International Society of Dynamic Games* **10** (2009), pp. 133-145.

J20. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. Consensus Based Overlapping Decentralized Estimator, *IEEE Transactions on Automatic Control* **54** (2009), pp. 410-415.

J21. P. F. Hokayem, D. M. Stipanović, and M. W. Spong. Semiautonomous Control of Multiple Networked Langrangian Systems, *International Journal of Robust and Nonlinear Control* **19** (2009), pp. 2040-2055.

J22. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. A Consensus Based Overlapping Decentralized Estimator with Missing Observations and Communication Faults, *Automatica* **45** (2009), pp. 1397-1406.

J23. D. M. Stipanović, A. Melikyan, and N. Hovakimyan. Guaranteed Strategies for Nonlinear Multi-Player Pursuit-Evasion Games, *International Game Theory Review* **12** (2010), pp. 1-17.

J24. Y.-C. E. Yang , X. Cai, and D. M. Stipanović. A Decentralized Optimization Algorithm for Multi-Agent System Based Watershed Management, *Water Resources Research* **45** (2009), W08430, doi:10.1029/2008WR007634.

J25. R. Teo, D. M. Stipanović, and C. J. Tomlin. Decentralized Spacing Control of a String of Multiple Vehicles over Lossy Datalink, *IEEE Transactions on Control Systems Technology* **18** (2010), pp. 469-473.

J26. E. J. Rodríguez-Seda, J. J. Troy, C. A. Erignac, P. Murray, D. M. Stipanović, and M. W. Spong. Bilateral Teleoperation of Multiple Mobile Agents: Formation Control and Collision Avoidance, *IEEE Transactions on Control Systems Technology* **18** (2010), pp. 984-992.

J27. S. Mastellone, J. S. Mejía, D. M. Stipanović, and M. W. Spong. Formation Control and Coordinated Tracking via Asymptotic Decoupling for Lagrangian Multi-Agent Systems, *Automatica* **47** (2011), pp. 2355-2363.

J28. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. Decentralized Parameter Estimation by Consensus Based Stochastic Approximation, *IEEE Transactions on Automatic Control* **56** (2011), pp. 531-543.

J29. Sriram, D. M. Stipanović, and C. J. Tomlin. Collision Avoidance Strategies for a Three Player Game, *Annals of the International Society of Dynamic Games* **11** (2011), pp. 253-271.

J30. M. S. Stanković and D. M. Stipanović. Extremum Seeking under Stochastic Noise and Applications to Mobile Sensors, *Automatica* **46** (2010), pp. 1243-1251.

J31. P. F. Hokayem, D. M. Stipanović, and M. W. Spong. Coordination and Collision Avoidance for Lagrangian Systems with Disturbances, *Applied Mathematics and Computation* **217** (2010), pp. 1085-1094.

J32. C. R. Burns, R. F. Wang, and D. M. Stipanović. A Study of Human and Receding Horizon Controller Performance of a Remote Navigation Task with Obstacles and Feedback Delays, *Paladyn, Journal of Behavioral Robotics* **2** (2011), pp. 44-63.

J33. D. M. Stipanović, C. J. Tomlin, and G. Leitmann. A Note on Monotone Approximations of Minimum and Maximum Functions and Multi-Objective Problems, *Numerical Algebra, Control and Optimization* **1** (2011), pp. 487-493.

J34. M. S. Stanković, K. H. Johansson, and D. M. Stipanović. Distributed Seeking of Nash Equilibria with Applications to Mobile Sensor Networks, *IEEE Transactions on Automatic Control* **57** (2012), pp. 904-919.

J35. E. J. Rodríguez-Seda, D. M. Stipanović, and M. W. Spong. Teleoperation of Multi-Agent Systems with Nonuniform Control Input Delays, *Integrated Computer-Aided Engineering* **19** (2012), pp. 125-136.

J36. C. R. Burns, R. F. Wang, and D. M. Stipanović. A Study of the Impact of Delay on Human Remote Navigators with Application to Receding Horizon Control, *Paladyn, Journal of Behavioral Robotics* **3** (2012), pp. 63-74.

J37. D. M. Stipanović, C. J. Tomlin, and G. Leitmann. Monotone Approximations of Minimum and Maximum Functions and Multi-Objective Problems, *Applied Mathematics & Optimization* **66** (2012), pp. 455-473.

J38. D. M. Stipanović, C. Valicka, C. J. Tomlin, and T. R. Bewley. Safe and Reliable Coverage Control, *Numerical Algebra, Control and Optimization* **3** (2013), pp. 31-48.

J39. M. Saska, J. S. Mejía, D. M. Stipanović, V. Vonásek, K. Schilling, and L. Přeučil. Control and Navigation in Maneuvers of Formations of Unmanned Mobile Vehicles, *European Journal of Control* **19** (2013), pp. 157-171.

J40. M. Saska, J. S. Mejía, D. M. Stipanović, V. Vonásek, K. Schilling, and L. Přeučil. Reply to the Discussion on: "Control and Navigation in Maneuvers of Formations of Unmanned Mobile Vehicles", *European Journal of Control* **19** (2013), pp. 176-177.

J41. D. M. Stipanović, C. Valicka, and A. E. Abbas. Control Strategies for Players in Pursuit-Evasion Games Based on their Preferences, special issue on Dynamic Games of the *International Game Theory Review* dedicated to the memory of N. N. Krasovsky **16** (2014), pp. 1440008:1-20.

J42. S. S. Stanković, D. M. Stipanović, and M. S. Stanković. Decentralized Overlapping Tracking Control, *International Journal of General Systems, Special Issue: Distributed Estimation and Control for General Systems* **43** (2014), pp. 282-293.

J43. F. E. Udwadia, P. B. Koganti, T. Wanichanonc, and D. M. Stipanović. Decentralised control of nonlinear dynamical systems, *International Journal of Control* **87** (2014), pp. 827-843.

J44. C. Valicka, R. A. Rekoske, D. M. Stipanović, and A. E. Abbas. Multiattribute Utility Copulas for Multi-objective Coverage Control, *Paladyn, Journal of Behavioral Robotics* **5** (2014), pp. 12-34.

J45. E. J. Rodríguez-Seda, C. Tang, M. W. Spong, and D. M. Stipanović, Trajectory Tracking with Collision Avoidance for Nonholonomic Vehicles with Acceleration Constraints and Limited Sensing, *International Journal of Robotics Research* **33** (2014), pp. 1569-1592.

J46. G. M. Atinc, D. M. Stipanović, and P. G. Voulgaris. Supervised Coverage Control of Multi-Agent Systems, *Automatica* **50** (2014), pp. 2936-2942.

J47. C. Franco, D. M. Stipanović, G. Lopez-Nicolas, C. Sagues, and S. Llorente. Persistent Coverage Control for a Team of Agents with Collision Avoidance, *European Journal of Control* **22** (2015), pp. 30-45.

J48. D. Panagou, D. M. Stipanović, and P. G. Voulgaris. Dynamic Coverage Control in Multi-Robot Networks, *Multi-Robot Systems, Frontiers in Robotics and AI* **3** (2015), pp. 1-17.

J49. A. Zatezalo and D. M. Stipanović. Control of Dynamical Systems with Discrete and Uncertain Observations, *Discrete and Continuous Dynamical Systems-Series A* **35** (2015), pp. 4665-4681.

J50. M. S. Stanković, S. S. Stanković, and D. M. Stipanović. Consensus Based Decentralized Real Time Identification of Errors-in-Variables Systems, *Automatica* **60** (2015), pp. 219-226.

J51. E. J. Rodríguez-Seda, D. M. Stipanović, and M. W. Spong. Guaranteed Collision Avoidance for Autonomous Systems with Acceleration Constraints and Sensing Uncertainties, *Journal of Optimization Theory and Applications* **168** (2016), pp. 1014-1038.

J52. D. Panagou, D. M. Stipanović, and P. G. Voulgaris. Distributed Coordination Control for Multi-Robot Networks using Lyapunov-Like Barrier Functions, *IEEE Transactions on Automatic Control* **61** (2016), pp. 617-632.

J53. J. S. Moon, D. M. Stipanović, and M. W. Spong. Gait Generation and Stabilization for Nearly Passive Dynamic Walking and Speed Regulation on Flat Ground, *Asian Journal of Control* **18** (2016), pp. 1343-1358.

J54. Z. Zhou, W. Zhang, J. Ding, H. Huang, D. M. Stipanović, and C. J. Tomlin. Cooperative Pursuit with Voronoi Partitions, *Automatica* **72** (2016), pp. 64-72.

J55. D. Panagou, D. M. Stipanović, and P. G. Voulgaris. Distributed dynamic coverage and avoidance control under anisotropic sensing, *IEEE Transactions on Control of Network Systems* **4** (2017), pp. 850-862.

J56. I. Shevchenko and D. M. Stipanović. A Design of Strategies in Alternative Pursuit Games, *Contributions to Game Theory and Management*. Vol. IX (2016), Saint Petersburg State University, pp. 266--275.

J57. A. Lekić and D. M. Stipanović. Hysteresis Switching Control of the Ćuk Converter, *IEEE Transactions on Circuits and Systems I: Regular Papers* **63** (2016), pp. 2048 - 2061.

J58. A. Lekić and D. M. Stipanović. LMI Approach for Sliding Mode Control and Analysis of DC-DC Converters, *Tehnika* **71** (2016), pp. 715-723.

J59. A. Lekić and D. M. Stipanović. Hysteresis Switching Control of the Ćuk Converter Operating in Discontinuous Conduction Modes, *IEEE Transactions on Circuits and Systems II: Express Briefs* **64** (2017), pp. 1077-1081.

J60. V. Cichella, T. Marinho, D. M. Stipanović, N. Hovakimyan, I. Kaminer, and A. Trujillo. Collision avoidance based on line-of-sight angle: Guaranteed safety using low-cost sensors, *Journal of Intelligent and Robotic Systems* **89** (2017), pp. 139–153.

J61. S. A. Deka, X. Li, D. M. Stipanović, and T. Kesavadas. Robust and safe coordination of multiple robotic manipulators, *Journal of Intelligent and Robotic Systems* **90** (2018), Issue 3-4, pp. 419-435.

J62. A. Lekić, D. M. Stipanović. and N. Petrović. Controlling the Ćuk Converter Using Polytopic Lyapunov Functions, *IEEE Transactions on Circuits and Systems II: Express Briefs* **60** (2018), Issue 11, pp. 1678-1682.

J63. S. A. Deka, D. M. Stipanović, and T. Kesavadas. Stable bilateral teleoperation with bounded control, to appear in *IEEE Transactions on Control Systems Technology*, doi: 10.1109/TCST.2018.2871874.

J64. N. Petrović, A. Lekić and D. M. Stipanović. Lyapunov Characterization and Analysis of the Operating Modes of the AC–DC Ćuk Converter, *IEEE Journal of Emerging and Selected Topics in Power Electronics*, vol. 7, 2019, pp. 1318-1328.

J65. S. A. Deka, D. M. Stipanović, B. Murmann and C. J. Tomlin. Global Asymptotic Stability and Stabilization of Long Short-Term Memory Neural Networks with Constant Weights and Biases, *Journal of Optimization Theory and Applications*, vol.

181, pp. 231-243, 2019.

J66. M. Karkoub, G. M. Atinc, D. M. Stipanović, P. G. Voulgaris, and A. Hwang. Trajectory Tracking Control of Unicycle Robots with Collision Avoidance and Connectivity Maintenance, to appear in *Journal of Intelligent and Robotic Systems*.

4. Референце националног нивоа у другим државама (публикације у страним националним часописима, самосталне или колективне изложбе, уметнички или спортски наступи на билатералном нивоу):

5. Референце националног нивоа (публикације у домаћим часописима, самосталне или колективне домаће изложбе и уметнички или спортски наступи у земљи:

6. Саопштења на међународним научним скуповима:

C1. D. M. Stipanović and D. D. Šiljak. Convex *M*-matrices and polytopic dynamic systems, *Proceedings of the 1997 IEEE Control and Decision Conference*, San Diego, California, December 10-12 (1997), pp. 4366-4368.

C2. D. D. Šiljak and D. M. Stipanović. Robust *D*-stability via positivity, *Proceedings of the 1998 American Control Conference*, Philadelphia, Pennsylvania, June 24-26 (1998), pp. 2502-2509.

C3. D. D. Šiljak and D. M. Stipanović. Polytopic Connective Stability, *IFAC Symposium on Large Scale Systems*, Patras, Greece, July 8-11 (1998), pp. 26-32.

C4. D. D. Šiljak and D. M. Stipanović. SPR Criteria for Uncertain Rational Functions and Matrices Via Polynomial Positivity and Bernstein's Expansions, *Proceedings of the 6th Saint Petersburg Symposium on Adaptive Systems Theory*, St. Petersburg, Russia, September 7-9 (1999), pp.181-189.

C5. D. M. Stipanović and D. D. Šiljak. Robust Strict Positive Realness via Polynomial Positivity, *Proceedings of the 2000 American Control Conference*, Chicago, Illinois, June 28-30 (2000), pp. 4318-4325.

C6. D. D. Šiljak and D. M. Stipanović. Organically-Structured Control, *Proceedings of the 2001 American Control Conference*, Arlington, Virginia, June 25-27 (2001), pp. 2736-2742.

C7. D. M. Stipanović and D. D. Šiljak. Connective Stability of Discontinuous Interconnected Systems *via* Parameter-Dependent Liapunov Functions, *Proceedings of the 2001 American Control Conference*, Arlington, Virginia, June 25-27 (2001), pp. 4189-4196.

C8. D. D. Šiljak and D. M. Stipanović. Autonomous Decentralized Control, *Proceedings of the ASME International Mechanical Engineering Conference and Exposition*, New York, New York, November 11-16 (2001), pp.761-765.

C9. D. D. Šiljak and D. M. Stipanović. Stability of Two-Variable Polynomials via Positivity, *Proceedings of the 15th IFAC World Congress on Automatic Control*, Barcelona, Spain, July 21-26 (2002), Volume C: Stability and Nonlinear Systems, pp. 7-12.

C10. R. Teo, D. M. Stipanović, and C. J. Tomlin. Cooperative Spacing Control of Multiple Vehicles over a Lossy Datalink, *Proceedings of the 2002 Asian Control Conference*, Singapore, September 25-27 (2002), pp. 2063-2068.

C11. G. İnalhan, D. M. Stipanović, and C. J. Tomlin. Decentralized Optimization, with Application to Multiple Aircraft Coordination, *Proceedings of the 2002 IEEE Conference on Decision and Control*, Las Vegas, Nevada, December 10-13 (2002), pp. 1147-1155.

C12. D. M. Stipanović, G. İnalhan, R. Teo, and C. J. Tomlin. Decentralized Overlapping Control of a Formation of Unmanned Aerial Vehicles, *Proceedings of the 2002 IEEE Conference on Decision and Control*, Las Vegas, Nevada, December 10-13 (2002), pp. 2829-2835.

C13. I. Hwang, D. M. Stipanović, and C. J. Tomlin. Applications of Polytopic Approximations of Reachable Sets to Linear Dynamic Games and a Class of

Nonlinear Systems, *Proceedings of the 2003 American Control Conference*, Denver, Colorado, June 4-6 (2003), pp. 4613-4619.

C14. D. M. Stipanović, I. Hwang, and C. J. Tomlin. Computation of an Over-Approximation of the Backward Reachable Set using Subsystem Level Set Functions, in the *Proceedings of the 2003 European Control Conference*, Cambridge, United Kingdom, September 1-4 (2003), 6 double column pages.

C15. R. Teo, D. M. Stipanović, and C. J. Tomlin. Decentralized Spacing Control of a String of Multiple Vehicles over Lossy Datalink, *Proceedings of the 2003 IEEE Control and Decision Conference*, Maui, Hawaii, December 9-12 (2003), pp. 682-687.

C16. Sriram, D. M. Stipanović, and C. J. Tomlin. Cooperative and Non-Cooperative Solutions for Linear Quadratic Differential Games, in the *Proceedings of the 11th International Symposium on Dynamic Games and Applications*, Tucson, Arizona, December 18-21 (2004), 15 single column pages.

C17. D. M. Stipanović, Sriram, and C. J. Tomlin. Strategies for Agents in Multi-Player Pursuit-Evasion Games, in the *Proceedings of the 11th International Symposium on Dynamic Games and Applications*, Tucson, Arizona, December 18-21 (2004), 16 single column pages.

C18. P. F. Hokayem, D. M. Stipanović, and M. W. Spong. Suboptimal Master-Slave Teleoperation Control with Delays, *Proceedings of the 2006 American Control Conference*, Minneapolis, Minnesota, June 14-16 (2006), pp. 2028-2033.

C19. D. M. Stipanović, A. Melikyan, and N. Hovakimyan. Pursuit-Evasion Games with Two Pursuers on the Moving Time Horizon, in the *Proceedings of the 12th International Symposium on Dynamic Games and Applications***,** Sophia Antipolis, France, July 3-5 (2006), 3 single column pages.

C20. I. I. Hussein and D. M. Stipanović. Effective Coverage Control using Dynamic Sensor Networks, *Proceedings of the 2006 IEEE Control and Decision Conference*, San Diego, California, December 13-15 (2006), pp. 2747-2752.

C21. S. Mastellone, D. M. Stipanović, and M. W. Spong. Remote Formation Control and Collision Avoidance for Multi-Agent Nonholonomic Systems, *Proceedings of the 2007 IEEE International Conference on Robotics and Automation*, Roma, Italy, April 10-14 (2007), pp. 1062-1067.

C22. J. S. Mejía and D. M. Stipanović. Safe Trajectory Tracking for the Two Aircraft System, *Proceedings of the 2007 IEEE EIT International Conference*, Chicago, Illinois, May 17-20 (2007), pp. 362-367.

C23. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. Consensus Based Multi-Agent Parameter Estimation by Stochastic Approximation, *Proceedings of the 51st Conference for Electronics, Telecommunications, Computers, Automatic Control, and Nuclear Engineering*, ISBN 978-86-80509-624, Herceg Novi-Igalo, Serbia and Montenegro, June 4-8 (2007), paper AU3.5, pp. 1-4.

C24. I. I. Hussein and D. M. Stipanović. Effective Coverage Control using Dynamic Sensor Networks with Flocking and Guaranteed Collision Avoidance, *Proceedings of the 2007 American Control Conference*, New York, New York, July 9-13 (2007), pp. 3420-3425.

C25. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. Consensus Based Overlapping Decentralized Estimator, *Proceedings of the 2007 American Control Conference*, New York, New York, July 9-13 (2007), pp. 2744-2749.

C26. P. F. Hokayem, D. M. Stipanović, and M. W. Spong. Reliable Control of Multi-Agent Formations, *Proceedings of the 2007 American Control Conference*, New York, New York, July 9-13 (2007), pp. 1882-1887.

C27. P. F. Hokayem, D. M. Stipanović, and M. W. Spong. Dynamic Coverage Control with Limited Communication, *Proceedings of the 2007 American Control Conference*, New York, New York, July 9-13 (2007), pp. 4878-4883.

C28. S. Mastellone, D. M. Stipanović, and M. W. Spong. Multi-Agents Formation Control and Trajectory Tracking via Singular

Perturbation, *Proceedings of the 2007 IEEE Multi-conference on Systems and Control*, Singapore, October 1-3 (2007), pp. 557-562.

C29. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. Decentralized Parameter Estimation by Consensus Based Stochastic Approximation, *Proceedings of the 2007 IEEE Control and Decision Conference*, New Orleans, Louisiana, December 12-14 (2007), pp. 1535-1540.

C30. S. Mastellone, D. M. Stipanović, and M. W. Spong. Stability and Convergence for Systems with Switching Equilibria, *Proceedings of the 2007 IEEE Control and Decision Conference*, New Orleans, Louisiana, December 12-14 (2007), pp. 4013-4020.

C31. P. F. Hokayem, D. M. Stipanović, and M. W. Spong. On Persistent Coverage Control, *Proceedings of the 2007 IEEE Control and Decision Conference*, New Orleans, Louisiana, December 12-14 (2007), pp. 6130-6135.

C32. I. I. Hussein, D. M. Stipanović, and Y. Wang. Reliable Coverage Control using Heterogeneous Vehicles, *Proceedings of the 2007 IEEE Control and Decision Conference*, New Orleans, Louisiana, December 12-14 (2007), pp. 6142-6147.

C33. M. S. Stanković, D. M. Stipanović, and S. S. Stanković. Consensus Based Overlapping Decentralized Control, *Proceedings of the 52nd Conference for Electronics, Telecommunications, Computers, Automatic Control, and Nuclear Engineering*, ISBN 978-86-80509-63-1, Palić, Serbia, June 8-12 (2008), paper AU1.5, pp. 1-4.

C34. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. A Consensus Based Overlapping Decentralized Estimator in Lossy Networks: Stability and Denoising Effects, *Proceedings of the 2008 American Control Conference*, Seattle, Washington, June 11-13 (2008), pp. 4364-4369.

C35. N. Chopra, D. M. Stipanović, and M. W. Spong. On Synchronization and Collision Avoidance for Mechanical Systems, *Proceedings of the 2008 American Control Conference*, Seattle, Washington, June 11-13 (2008), pp. 3713-3718.

C36. S. S. Stanković, M. S. Stanković, and D. M. Stipanović. Consensus Based Overlapping Decentralized Estimation with Missing Observations and Communication Faults, *Proceedings of the 17th IFAC World Congress*, Seoul, Korea, July 6-11 (2008), pp. 9338-9343.

C37. M. S. Stanković, S. S. Stanković, and D. M. Stipanović. Consensus Based Multi-Agent Control Structures, *Proceedings of the 2008 IEEE Control and Decision Conference*, Cancun, Mexico, December 9-11 (2008), pp. 4364-4369.

C38. J. S. Mejía and D. M. Stipanović. Asymptotic Stabilization using a Constructive Approach to Constrained Nonlinear Model Predictive Control, *Proceedings of the 2008 IEEE Control and Decision Conference*, Cancun, Mexico, December 9-11 (2008), pp. 4061-4066.

C39. C. G. Valicka, S. R. Bieniawski, J. Vian, and D. M. Stipanović. Cooperative Avoidance Control for UAVs, *Proceedings of the Tenth International Conference on Control, Automation, Robotics and Vision (ICARCV 2008)*, Hanoi, Vietnam, December 17-20 (2008), pp. 1462-1468.

C40. M. S. Stanković and D. M. Stipanović. Stochastic Extremum Seeking with Applications to Mobile Sensor Networks, *Proceedings of the 2009 American Control Conference*, St. Louis, Missouri, June 10-12 (2009), pp. 5622-5627.

C41. S. S. Stanković, D. M. Stipanović, and M. S. Stanković. Decentralized Overlapping Tracking Control of a Formation of Autonomous Unmanned Vehicles, *Proceedings of the 2009 American Control Conference*, St. Louis, Missouri, June 10-12 (2009), pp. 3878-3883.

C42. D. M. Stipanović. A Survey and Some New Results in Avoidance Control, *Proceedings of the 15th International Workshop on Dynamics and Control*, Tossa de Mar, Spain, May 31-June 3 (2009), pp. 166-173.

C43. M. Saska, J. S. Mejía, D. M. Stipanović, and K. Schilling. Control and Navigation of Formations of Car-Like Robots on a Receding Horizon, *Proceedings of the 2009*

IEEE Multi-conference on Systems and Control, St Petersburg, Russia, July 8-10 (2009), pp. 1761-1766.

C44. J. S. Mejía and D. M. Stipanović. A Modified Contractive Model Predictive Control Approach, *Proceedings of the 2009 IEEE Control and Decision Conference*, pp. 1968-1973.

C45. J. S. Mejía and D. M. Stipanović. Safe Coordination Control Policy for Multiple Input Constrained Nonholonomic Vehicles, *Proceedings of the 2009 IEEE Control and Decision Conference*, pp. 5679-5684.

C46. K. Srivastava, D. M. Stipanović, and M. W. Spong. On a Stochastic Robotic Surveillance Problem, *Proceedings of the 2009 IEEE Control and Decision Conference*, pp. 8567-8574.

C47. M. S. Stanković and D. M. Stipanović. Discrete Time Extremum Seeking for Autonomous Vehicle Target Tracking in Stochastic Environment, *Proceedings of the 2009 IEEE Control and Decision Conference*, pp. 4541-4546.

C48. X. Chen, A. E. Abbas, and D. M. Stipanović, A Multiattribute Utility Approach to Target Assignment, *Proceedings of the 2009 Dynamic Systems and Control Conference*, pp. 419-425.

C49. C. Burns, J. Zearing, F. R. Wang, and D. M. Stipanović. Autonomous and Semiautonomous Control Simulator, *Proceedings of the AAAI Symposium of Embedded Reasoning*, Stanford, California, March 2010, pp. 10-16.

C50. J. S. Mejía, K. Srivastava, and D. M. Stipanović. Collision Avoidance and Trajectory Tracking Control based on Approximations of the Maximum Function, *Proceedings of the 2010 American Control Conference*, pp. 3051-3056.

C51. M. S. Stanković, D. M. Stipanović, and S. S. Stanković. Decentralized Consensus Based Control Methodology for Vehicle Formations in Air and Deep Space, *Proceedings of the 2010 American Control Conference*, pp. 3660-3665.

C52. E. J. Rodríguez-Seda, P. O. López-Montesinos, D. M. Stipanović, and M. W. Spong. Model Reference Robust Control for a Class of Nonlinear Systems with Input and Measurement Delays, *Proceedings of the 2010 American Control Conference*, pp. 6585-6592.

C53. M. S. Stanković, K. H. Johansson, and D. M. Stipanović. Distributed Seeking of Nash Equilibria in Mobile Sensor Networks, *Proceedings of the 2010 IEEE Control and Decision Conference*, pp. 5598-5603.

C54. K. Srivastava, A. Nedić, D. M. Stipanović. Distributed Constrained Optimization over Noisy Networks, *Proceedings of the 2010 IEEE Control and Decision Conference*, pp. 1945-1950.

C55. T. Brdar, S. Bieniawski, D. M. Stipanović, and J. Vian. Application of Collision Avoidance on Flying Vehicles, *Proceedings of the AIAA Guidance, Navigation, and Control Conference*, Toronto, Ontario, Canada, August 2-5 (2010), 10 single-column single-space pages, Chapter DOI: 10.2514/6.2010-8085

C56. E. J. Rodríguez-Seda, D. M. Stipanović, and M. W. Spong. Collision Avoidance Control with Sensing Uncertainties, *Proceedings of the 2011 American Control Conference*, pp. 3363-3368.

C57. G. Atinc and D. M. Stipanović. Cooperative Collision-Free Control of Lagrangian Multi-Agent Formations, *Proceedings of the 2011 American Control Conference*, pp. 2801-2806.

C58. Z. Li, N. Hovakimyan, and D. M. Stipanović. Distributed Multi-Agent Tracking and Estimation with Uncertain Agent Dynamics, *Proceedings of the 2011 American Control Conference*, pp.2204-2209.

C59. K. Srivastava, A. Nedić, and D. M. Stipanović. Distributed Min-Max Optimization in Networks, *Proceedings of the 17th International Conference on Digital Signal Processing*, pp. 1-8.

C60. E. J. Rodríguez-Seda, D. M. Stipanović, and M. W. Spong. Lyapunov-Based Cooperative Avoidance Control for Multiple Lagrangian Systems with Bounded Sensing Uncertainties, *Proceedings of the 2011 IEEE Control and Decision Conference*, pp. 4207-4213.

C61. M. S. Stanković, S. S. Stanković, and D. M. Stipanović. Decentralized Identification for Errors-in-Variables Systems Based on a Consensus Algorithm, *Proceedings of the 2011 IEEE Control and Decision Conference*, pp. 2951-2956.

C62. H. Huang, W. Zhang, J. Ding, D. M. Stipanović, and C. J. Tomlin. Guaranteed Decentralized Pursuit-Evasion in the Plane with Multiple Pursuers, *Proceedings of the 2011 IEEE Control and Decision Conference*, pp. 4835-4840.

C63. S. Pan, H. Huang, W. Zhang, J. Ding, D. M. Stipanović, and C. J. Tomlin.Pursuit, Evasion, and Defense in the Plane, *Proceedings of the 2012 American Control Conference*, pp. 4167-4173.

C64. C. Franco, G. Lopez-Nicolas, D. M. Stipanović, and C. Sagues. Anisotropic Vision-Based Coverage Control for Mobile Robots, *Proceedings of the 2nd Workshop on Visual Control of Mobile Robots*, October 11th, 2012, Vilamoura, Algarve, Portugal, in conjunction with the IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS), pp. 31-36.

C65. C. Valicka, D. M. Stipanović, and A. E. Abbas. Multiattribute Copulas for Multiobjective Control, *Proceedings of the 2013 American Control Conference*, pp. 3218-3223.

C66. G. M. Atinc, D. M. Stipanović, P. G. Voulgaris, and M. Karkoub. Collision-Free Trajectory Tracking while Preserving Connectivity in Unicycle Multi-Agent Systems, *Proceedings of the 2013 American Control Conference*, pp. 5392-5397.

C67. G. M. Atinc, D. M. Stipanović, P. G. Voulgaris, and M. Karkoub. Supervised Coverage Control with Guaranteed Collision Avoidance and Proximity Maintenance, *Proceedings of the 2013 IEEE Control and Decision Conference*, pp. 3463 - 3468.

C68. D. Panagou, D. M. Stipanović, and P. G. Voulgaris. Multi-Objective Control for Multi-Agent Systems using Lyapunov-like Barrier Functions, *Proceedings of the 2013 IEEE Control and Decision Conference*, pp. 1478 - 1483.

C69. G. M. Atinc, D. M. Stipanović, P. G. Voulgaris, and M. Karkoub. Swarm-Based Dynamic Coverage Control, *Proceedings of the 2014 IEEE Control and Decision Conference*, pp. 6963-6968.

C70. D. Panagou, D. M. Stipanović, and P. G. Voulgaris. Vision-based dynamic coverage control for nonholonomic agents, *Proceedings of the 2014 IEEE Control and Decision Conference*, pp. 2198-2203.

C71. A. Zatezalo, D. M. Stipanović, and A. E. Abbas. Multi-Agent Multi-Objective Control Design with Discrete-Time Information Updates and Preferences, *Proceedings of the 2015 IcETRAN Conference*.

C72. V. Cichella, T. Marinho, D. M. Stipanović, N. Hovakimyan, I. Kaminer, and A. Trujillo. Collision Avoidance Based on Line-of-Sight Angle, *Proceedings of the 2015 IEEE Control and Decision Conference*, pp. 6779-6784.

C73. A. Lekić, D. M. Stipanović. and N. Petrović. Controlling the Ćuk Converter Using Polytopic Lyapunov Functions, *Proceedings of the 19th Symposium Power Electronics Ee2017, October 19-21, 2017*.

C74. A. Lekić and D. M. Stipanović. Stable switching control of DC-DC converters. Proceedings of the 2017 Telecommunication Forum (TELFOR), November 21-22, pp. 1-7.

C75. D. M. Stipanović, B. Murmann, M. Causo, A. Lekić, V. R. Royo, C. J. Tomlin, E. Beigne, S. Thuries, M. Zarudniev and S. Lesecq, "Some local stability properties of an autonomous long short-term memory neural network model," in *Proceedings of the 2018 IEEE International Symposium on Circuits and Systems*, Florence, Italy, 2018.

C76. M. Amrouche, S. A. Deka, A. Lekić, V. R. Royo, D. M. Stipanović, B. Murmann and C. J. Tomlin, Long Short-Term Memory Neural Network Equilibria Computation and Analysis, in Workshop on Modeling and decision-making in the spatiotemporal domain, 32nd Conference on Neural Information Processing Systems (NIPS), Montreal, Canada, 2018.

C77. T. Marinho, M. Amrouche, V. Cichella, D. M. Stipanović and N. Hovakimyan, Guaranteed collision avoidance based on line-of-sight angle and time to collision, in

Proceedings of the 2018 American Control Conference, 2018.

C78. S. A. Deka, D. M. Stipanović, B. Murmann and C. J. Tomlin, Long-Short Term Memory Neural Network Stability and Stabilization using Linear Matrix Inequalities, in Proceedings of the 2019 IEEE International Symposium on Circuits and Systems, Sapporo, Japan, 2019.

C79. I. Vasiljević, A. Lekić and D. M. Stipanović. Lyapunov Analysis of the Chaotic Colpitts Oscillator, in Proceedings of the 2019 IEEE International Symposium on Circuits and Systems, Sapporo, Japan, 2019.

C80. A. Lekić, A. E. Aroudi and D. M. Stipanović. Polytopic Control of a PV-Fed SEPIC DC-DC Converter, in Proceedings of the 2019 IEEE International Symposium on Circuits and Systems, Sapporo, Japan, 2019.

7. Саопштења на домаћим научним скуповима:

8. Радови у којима је кандидат једини аутор и први коаутор:

D. M. Stipanović and D. D. Šiljak. Stability of polytopic systems *via* convex *M*-matrices and parameter-dependent Liapunov functions, *Nonlinear Analysis* **40** (2000), pp. 589-609.

D. M. Stipanović and D. D. Šiljak. Jacobi and Gauss-Seidel Iterations for Polytopic Systems: Convergence *via* convex *M*-matrices, *Reliable Computing* **6** (2000), pp. 123-137

D. M. Stipanović and D. D. Šiljak. Robust stability and stabilization of discrete-time nonlinear systems: The LMI approach, *International Journal of Control* **74** (2001), pp. 873-879.

*D. M. Stipanović and D. D. Šiljak. SPR Criteria for Uncertain Rational Functions and Matrices Via Polynomial Positivity and Bernstein's Expansion, IEEE Transactions on Circuits and Systems I: Fundamental Theory and Applications **48** (2001), pp. 1366-1369.*

*D. M. Stipanović, I. Hwang, and C. J. Tomlin. Computation of an Over-Approximation of the Backward Reachable Set using Subsystem Level Set Functions, Dynamics of Continuous, Discrete and Impulsive Systems, Series **A**: Mathematical Analysis **11** (2004), pp. 399-411.*

*D. M. Stipanović, A. Melikyan, and N. Hovakimyan. Guaranteed Strategies for Nonlinear Multi-Player Pursuit-Evasion Games, International Game Theory Review **12** (2010), pp. 1-17.*

*D. M. Stipanović, C. J. Tomlin, and G. Leitmann. A Note on Monotone Approximations of Minimum and Maximum Functions and Multi-Objective Problems, Numerical Algebra, Control and Optimization **1** (2011), pp. 487-493.*

*D. M. Stipanović, C. J. Tomlin, and G. Leitmann. Monotone Approximations of Minimum and Maximum Functions and Multi-Objective Problems, Applied Mathematics & Optimization **66** (2012), pp. 455-473.*

*D. M. Stipanović, C. Valicka, C. J. Tomlin, and T. R. Bewley. Safe and Reliable Coverage Control, Numerical Algebra, Control and Optimization **3** (2013), pp. 31-48.*

*D. M. Stipanović, C. Valicka, and A. E. Abbas. Control Strategies for Players in Pursuit-Evasion Games Based on their Preferences, special issue on Dynamic Games of the International Game Theory Review dedicated to the memory of N. N. Krasovsky **16** (2014), pp. 1440008:1-20.*

9. Индекс компетентности

Према сервису Scopus има 3179 цитата укупно у последњих 5 година,. Према истом сервису, h-index му је 28.

VII. **СТРУЧНИ РАД** (прихваћени или реализовани пројекти, патенти, законски текстови и др).

G1. 2005-2010, **Trustworthy collision avoidance over information links,** The Boeing Company, role: PI, $702,000 awarded to D. M. Stipanović (total: $702,000).

G2. 2008-2011, **Safe coordination of multiple autonomous vehicles**, NSF, role: PI, $174,990 awarded to D. M. Stipanović (total: $300,000).

G3. 2009-2010, **Autonomous and semi-autonomous control of unmanned vehicles**, UIUC Campus Research Board, role: PI, $20,000 awarded to D. M. Stipanović (total: $22,620).

G4. 2010-2013, **Decentralized estimation and vision-based guidance of fast autonomous systems with guaranteed performance in uncertain environments**, US Army Research Office, role: co-PI, $161,304 awarded to D. M. Stipanović (total: $360,189).

G5. 2010-2012, **Trustworthy collision avoidance over information links**, The Boeing Company, role: PI, $160,000 (plus one semester student RA) awarded to D. M. Stipanović.

G6. 2011-2014, **Smart systems for field monitoring and surveillance**, Qatar National Research Fund, role: co-PI. $150,000 awarded to D. M. Stipanović (total: $300,000).

G7. 2013, **Game-Theoretic Space Situational Analysis Toolbox**, Small Business Technology Transfer (STTR) proposal (Phase 1). $50,000 awarded to UIUC, role: PI, total: $150,000.

G8. 2015-2016, **Efficient Surveillance, Rescue, and Threat Detection using Decision Theory and Multi-Objective Control for Multi-Vehicle Systems**, 64K awarded to D. M. Stipanović, USC CREATE Homeland Security Center, Department of Homeland Security.

G9. 2015-2018, NSF National Robotics Initiative: Collaborative Research: **ASPIRE: Automation Supporting Prolonged Independent Residence for the Elderly**, role: co-PI, 1.2M total.

VIII. **ПРИЗНАЊА, НАГРАДЕ И ОДЛИКОВАЊА ЗА ПРОФЕСИОНАЛНИ РАД:**

- 2017 **Friedrich Wilhelm Bessel Research Award**, Alexander von Humboldt Foundation, Germany.
- 2008 **Alexander von Humboldt Research Fellowship Award**, Bonn, Germany.
- 2009 **Xerox Award for Faculty Research**, College of Engineering, University of Illinois.
- 2009 **Arnold O. Beckman Research Award**, University of Illinois.

IX **АНАЛИЗА РАДА КАНДИДАТА** (на једној страници куцаног текста):

Професор Душан Стипановић је 1998. године завршио интегрисане академске студије Електротехничком факултету, Универзитета у Београду. Магистарске студије и докторске студије је завршио на Department of Electrical Engineering, Santa Clara University, 1996 и 2000 године респективно. Након тога од 2001 до 2004 године био је на постдоктроским студијама на Stanford University.

Професор Стипановић је од 2004. године анагажован као наставник на. Department of Industrial and Enterprise Systems Engineering, Coordinated Science Laboratory and Information Trust Institute, University of Illinois at Urbana-Champaign, Illinois, USA. Где је прошао сва звања од доцента до редовног проесора. У звање редовног професора изабран је 2017 године. Наставник је на три предмета основних, мастер и докторских студија на матичном факултету.

Професор Стипановић је укупно обајвио 11 монографија/поглавља у монографијама, 66 радова у часоописма, 80 радова на конференцијама. Био је ментор на 10 докторских дисертација. Руководилац је на 9 научно-стручних пројеката, укупне вредности преко 3M$. Према сервису Scopus има 3179 цитата укупно у последњих 5 година,. Према истом сервису, h-index му је 28.

Добитник је више престижних награда за свој наставни и научни рад, последња је **Friedrich Wilhelm Bessel Research Award**, коју додељује фондација Alexander von Humboldt Foundation.

Члан је IEEE, American Institute of Aeronautics and Astronautics (AIAA), International Society of Dynamic Games (ISDG). У уредништву је већег броја часописа.

Важано је напоменути, да је у области Аутоматике и управљања системима, групација којој професор Стипановић припада, рангирана као прва на Шангаској листи.

Професор Душан Стипановић је својим наставним, научним, стручним и људским кавлитетима оставрио и остварује импресивне резулате, који могу значајно допринети јачању капацитета Универзитета у Новом Саду.

X МИШЉЕЊЕ О ИСПУЊЕНОСТИ УСЛОВА ЗА ИЗБОР У ЗВАЊЕ СВАКОГ КАНДИДАТА ПОЈЕДИНАЧНО

Професор Душан Стипановић је редовни професор на Department of Industrial and Enterprise Systems Engineering, Coordinated Science Laboratory and Information Trust Institute, University of Illinois at Urbana-Champaign, Illinois, USA.

Аутор је великог броја радова у журналима и на конференцијама. Обајвио је преко дест монографија и поглавља у монографијама. Био је ментор на великом броју докторских дисертација.

Научни стручни углед потврдио је кроз руковођење великог броја пројеката, уредништвом у часописима и признањима за свој рад.

XI ПРЕДЛОГ ЗА ИЗБОР КАНДИДАТА У ОДРЕЂЕНО ЗВАЊЕ НАСТАВНИКА

Комисија је становишта да је част и привилегија да се професор Душан Стипановић изабере у звање гостујућег професора Универзитета у Новом Саду.

ПОТПИСИ ЧЛАНОВА КОМИСИЈЕ

_____

др Зоран Д. Јеличић, ред. проф.

_____

др Бранко Ковачевић, ред. проф.

_____

др Филип Кулић, ред. проф.

_____

др Никола Јорговановић, ред. проф.

_____

др Александар Ердељан