An enhanced situational awareness of a mission for an autonomous vehicle by multirate control

Astrov, Igor; **Pedai, Andrus** Proceedings of the 5th WSEAS International Conference on Dynamical Systems and Control: CONTROL'09: La Laguna, Spain, July 1-3, 2009 2009 / p. 33-39

https://www.researchgate.net/publication/228809791_An_enhanced_situational_awareness_of_a_mission_for_an_autonomous_underwater_vehicle_by_multirate_control

An enhanced situational awareness of AUV's mission by multirate neural control

Astrov, Igor; **Pikkov, Mihhail** World Academy of Science, Engineering and Technology 2012 / p. 91-97 : ill https://zenodo.org/records/1335220

An enhanced situational awareness of AUV's mission by multirate neural control [Electronic resource]

Astrov, Igor; Pikkov, Mihhail ICMOS 2012 CD-ROM Proceedings: [International Conference on Modelling, Optimization and Simulation (ICMOS 2012), Berlin, Germany, September 19-20, 2012] 2012 / [7 p.]: ill [CD-ROM] https://zenodo.org/records/1335220

Comparative analysis of two types of models for multirate linear multivariable discrete-time control systems

Astrov, Igor; **Rüstern, Ennu** Proceedings of the 13th International Conference "Systems for Automation of Engineering and Research" (SAER'99): Varna, Bulgaria, September 18-19, 1999 1999 / p. 44-48

Comparison of single-rate and two-rate neural control approaches for coaxial rotor/ducted-fan TUAV for situational awareness applications

Pedai, Andrus; **Astrov, Igor**; **Udal, Andres** 2018 IEEE 16th International Symposium on Intelligent Systems and Informatics (SISY), 13-15 Sept. 2018 : proceedings 2018 / p. 63–68 : ill http://dx.doi.org/10.1109/SISY.2018.8524720

Control of hovering manoeuvres in unmanned helicopter for enhanced situational awareness

Astrov, Igor; **Pedai, Andrus** Proceedings of the 2009 IEEE International Conference on Mechatronics and Automation : August 9-12, Changchun, China 2009 / p. 143-146 : ill https://ieeexplore.ieee.org/document/5156580

Decentralization of stochastic multivariable discrete-time control systems on two-rate aggregative subsystems

Astrov, Igor; Rüstern, Ennu Proc. 14th International Conf. Systems for Automation of Engineering and Research 2000 / p. 57-61

Decentralized partitioning and simulation of three-rate stochastic multidimensional continuous-time state-space models Astrov, Igor; Em, Juri; Pedai, Andrus; Rüstern, Ennu Proc. 4th Portuguese Conference on Automatic Control (CONTROLO'2000) 2000 / p. 226-231

Decentralized partitioning of centralized controller on three-rate subcontrollers for the multidimensional stochastic statespace continuous-time model of an experimental aircraft

Astrov, Igor; **Pedai, Andrus**; **Rüstern, Ennu** Proc. 14th International Conf. Systems for Automation of Engineering and Research 2000 / p. 62-66

Decomposition of stochastic multivariable continuous-time control systems in state space on three-rate autonomous subsystems

Astrov, Igor; **Em, Juri**; **Rüstern, Ennu** Proceedings of the 12th International Conference on Systems for Automation of Engineering and Research (SAER'98): 19-20 September 1998, Varna - St. Konstantin resort, Bulgaria 1998 / p. 29-33

Decomposition of stochastic multivariable discrete-time control systems on autonomous subsystems with various rates of transients

Astrov, Igor; **Rüstern, Ennu** Proceedings of the 12th International Conference on Systems for Automation of Engineering and Research (SAER'98): 19-20 September 1998, Varna - St. Konstantin resort, Bulgaria 1998 / p. 39-43

Demand and supply chain simulation in telecommunication industry by multi-rate expert systems

Pedai, Andrus; Astrov, Igor Proceedings of World Academy of Science, Engineering and Technology 2008 / p. 268-270 : ill

Demand and supply chain simulation in telecommunication industry by multi-rate expert systems [Electronic resource]

Pedai, Andrus; Astrov, Igor WCSET 2008 CD-ROM proceedings: 2008 World Congress on Science, Engineering and Technology
(WCSET 2008, Prague, Czech Republic, July 25-27, 2008) 2008 / p. 268-270 [CD-ROM]

Depth control of an autonomous underwater vehicle in situational awareness a mission [Electronic resource]

Astrov, Igor; Rüstern, Ennu ICROS-SICE 2009 proceedings: ICROS-SICE International Joint Conference 2009: Fukuoka, Japan, August 18-21, 2009 2009 / p. 560-564 [DVD-ROM]

Depth controls of an autonomous underwater vehicle by neurocontrollers for enhanced situational awareness Astrov, Igor; Pedai, Andrus Proceedings of the World Academy of Science, Engineering and Technology 2009 / 55, p. 486-489

Depth controls of an autonomous underwater vehicle by neurocontrollers for enhanced situational awareness [Electronic resource]

Astrov, Igor; Pedai, Andrus WCSET 2009 CD-ROM proceedings: International Conference on Marine and Naval Engineering ICMNE 2009. 2009 World Congress on Science, Engineering and Technology: WCSET 2009: Oslo, Norway, July 29-31, 2009 2009 / p. 486-489 [CD-ROM]

Depth multirate control of an autonomous underwater vehicle for enhanced situational awareness [Electronic resource] Astrov, Igor; Pedai, Andrus; Rüstern, Ennu RoViSP'09 CD-ROM proceedings: 7th International Conference on Robotics, Vision, Signal Processing and Power Applications "Sustaining Engineers of Tomorrow": Awana Porto Malai, Langkawi Island, Malaysia, December 19-20, 2009 2009 / [8] p. [CD-ROM]

Design of multirate nonlinear discrete control systems

Astrov, Igor BEC'96: the 5th Biennial Baltic Electronics Conference, October 7-11, 1996, Tallinn, Estonia: proceedings 1996 / p. 355-358

Design of three-rate continuous-time subcontrollers for the multidimensional stochastic state-space model of an experimental aircraft

Astrov, Igor; **Pedai, Andrus**; **Rüstern, Ennu** The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference" : BEC 2000 : October 8 - 11, 2000, Tallinn, Estonia : conference proceedings 2000 / p. 277-280 : ill

Design of three-rate stochastic multivariable continuous-time control systems

Astrov, Igor; **Em, Juri**; **Rüstern, Ennu** BEC'98: the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia: proceedings 1998 / p. 325-328: ill

Design of two-rate decentralized linear quadratic regulators for continuous-time stochastic multivariable control systems Astrov, Igor; Em, Juri; Rüstern, Ennu The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference": BEC 2000: October 8 - 11, 2000, Tallinn, Estonia: conference proceedings 2000 / p. 273-276: ill

Design of two-rate stochastic multivariable continuous-time control systems: autonomous isolated subsystems with various rates of transients

Astrov, **Igor**; **Em**, **Juri**; **Rüstern**, **Ennu** BEC'98: the 6th Biennial Conference on Electronics and Microsystems Technology, October 7-9, 1998, Tallinn, Estonia: proceedings 1998 / p. 321-324: ill

Design of two-rate stochastic multivariable discrete-time control systems

Astrov, Igor; **Rüstern, Ennu** The 7th Biennial Conference on Electronics and Microsystem Technology "Baltic Electronics Conference": BEC 2000: October 8 - 11, 2000, Tallinn, Estonia: conference proceedings 2000 / p. 79-82: ill

Desired trajectory generation of a quadrotor helicopter using hybrid control for enhanced situational awareness Astrov, Igor; Pedai, Andrus; Rüstern, Ennu Proceedings of the 2010 IEEE International Conference on Information and Automation: June 20-23, Harbin, China 2010 / p. 1003-1007: ill

Development of artificial intelligence towards singularity

Pedai, Andrus; **Astrov, Igor** World Academy of Science, Engineering and Technology. Knowledge and innovation engineering 2014 / p. 81

Discrete control in three-rate nonlinear continuous-time systems

Astrov, Igor Abstracts of the 5th International Student Olympiad on Automatic Control (Baltic Olympiad), BOAC'96, October 2-4 1996, Saint-Petersburg, Russia 1996 / p. 19-21

Enhanced situational awareness for autonomous underwater vehicles

Astrov, Igor 2013

Enhanced situational awareness for AUV's stochastic model by multirate neural control

Astrov, Igor; **Pedai, Andrus** SysCon 2010 Proceedings : 2010 IEEE International Systems Conference (SysCon 2010), San Diego, California, USA, April 5-8, 2010 2010 / p. 66-70 : ill

Enhancing situational awareness by means of hybrid adaptive neural control of vertical flight in unmanned helicopter [Electronic resource]

Pedai, Andrus; **Astrov, Igor** ICCAS 2008 CD-ROM proceedings : International Conference on Control, Automation and Systems 2008 (ICCAS 2008, Seoul, Korea, October 14-17, 2008) 2008 / p. 329-332 [CD-ROM]

Enhancing situational awareness through multirate control of an autonomous underwater vehicle

Astrov, Igor; **Pedai, Andrus**; **Rüstern, Ennu** Proceedings of the 2009 IEEE International Conference on Mechatronics and Automation : August 9-12, Changchun, China 2009 / p. 1184-1189 : ill https://ieeexplore.ieee.org/document/5246459? reload=true&arnumber=5246459

Enhancing situational awareness through neural regulation of take-off and landing manoeuvres in unmanned helicopter Astrov, Igor; Pedai, Andrus Recent advances in computational intelligence, man-machine systems and cybernetics: proceedings of

7th WSEAS International Conference on Computational Intelligence, Man-machine Systems and Cybernetics (CIMMACS'08): Cairo, Egypt, December 29-31, 2008 2008 / p. 29-34

Experimentally adjusted modelling and simulation technique for a catamaran autonomous surface vessel Astrov, Igor; Udal, Andres; Mõlder, Heigo; Jalakas, Tanel; Möller, Taavi International Conference on Electrical, Computer, and Energy Technologies, ICECET 2022, Prague, Czech Republic, July 20-22, 2022 2022 / 7 p.: ill https://doi.org/10.1109/ICECET55527.2022.9873069

Fingerprint recognition for distorted image applications using three-rate hybrid Kohonen neural network

Astrov, Igor; Tatarly, Sergei; Tatarly, Svetlana; **Rüstern, Ennu** Mathematical Methods and Computational Techniques in Research and Education: 7th WSEAS International Conference on Wavelet Analysis and Multirate Systems (WAMUS'07): Arcachon, France, October 13-15, 2007 2007 / p. 122-126 https://dl.acm.org/doi/abs/10.5555/1974885.1974887

Fingerprint recognition for varied degrees of image distortion using three-rate hybrid Kohonen neural network Astrov, Igor; Tatarly, Sergei; Tatarly, Svetlana Proceedings of 2008 International Conference on Audio, Language and Image Processing (ICALIP 2008: Shanghai, China, July 7-9, 2008). 1 2008 / p. 363-369

Flight control of a trirotor mini-UAV for enhanced situational awareness

Astrov, Igor; Pedai, Andrus Proceedings of the World Academy of Science, Engineering and Technology 2010 / p. 271-277: ill

Flight control of a trirotor mini-UAV for enhanced situational awareness [Electronic resource]

Astrov, Igor; **Pedai, Andrus** ICAAE 2010 CD-ROM Proceedings: International Conference on Aeronautical and Astronautical Engineering: Amsterdam, Netherlands, September 28-29, 2010 2010 / p. 316-322 [CD-ROM]

Flight control of TUAV with coaxial rotor and ducted fan configuration by NARMA-L2 controllers for enhanced situational awareness

Astrov, Igor; Pedai, Andrus; Gordon, Boris World Academy of Science, Engineering and Technology 2012 / p. 75-81 : ill

Flight control of TUAV with coaxial rotor and ducted fan configuration by NARMA-L2 controllers for enhanced situational awareness [Electronic resource]

Astrov, Igor; **Pedai, Andrus**; **Gordon, Boris** ICCEA 2012 CD-ROM Proceedings: [International Conference on Computer Engineering and Applications (ICCEA 2012): Copenhagen, Denmark, June 11-12, 2012] 2012 / p. 75-81: ill [CD-ROM]

Flight control of unmanned rotorcrafts for enhanced situational awareness

Astrov, Igor 2014 https://www.ester.ee/record=b4528435*est

Flight control of vectored thrust aerial vehicle by neural network predictive controller for enhanced situational awareness Astrov, Igor; Pikkov, Mihhail; Paluoja, Rein World Academy of Science, Engineering and Technology 2013 / p. 77-81 : ill

Flight trajectory control of an eight-rotor UAV for enhanced situational awareness

Astrov, Igor; **Pedai, Andrus** Recent Researches in System Science : proceedings of the 15th WSEAS International Conference on Systems (part of the 15th WSEAS CSCC Multiconference) : Corfu Island, Greece, July 14-16, 2011 2011 / p. 77-82

Fuzzy logic control of three-rate decentralized optimal control submodels of the Lockheed L1011 Tristar aircraft Astrov, Igor; Pedai, Andrus Proceedings of the 5th IEEE International Conference on Intelligent Engineering Systems: Helsinki, 2001 2001 / p. 41-46

Fuzzy logic in simulation of Lockheed L1011 aircraft three-rate model

Astrov, Igor; **Rüstern, Ennu** IFAC Conference on New Technologies for Computer Control: NTCC 2001: 19-22 November 2001, Hong Kong: final program and abstracts 2001 / p. 516-521: ill

Kahekiiruselise mitmemõõtmelise diskreetse objekti uurimine : [magistritöö] : õppesuund: arvuti- ja süsteemitehnika Astrov, lgor 1992 http://www.ester.ee/record=b2676838*est

Low-quality fingerprint recognition using three-rate hybrid Kohonen neural network [Electronic resource]

Astrov, Igor; Tatarly, Sergei; Tatarly, Svetlana; **Rüstern, Ennu** Proceedings of the 6th International Conference on Information, Communications and Signal Processing: ICICS 2007: Singapore, December 10-13, 2007 2007 / [5] p. [CD-ROM] https://ieeexplore.ieee.org/document/4449586

LQG flight control of VTAV for enhanced situational awareness

Astrov, Igor; **Pikkov, Mihhail**; **Paluoja, Rein** World Academy of Science, Engineering and Technology. International journal of mechanical, industrial science and engineering 2013 / p. 981-986 : ill

A model-based adaptive control of an autonomous driving car for lane change maneuver

Astrov, Igor; **Udal, Andres**; **Jaanus, Martin** 2021 44th International Convention on Information, Communication and Electronic Technology (MIPRO), September 27 - October 1, 2021, Opatija, Croatia: proceedings 2021 / p. 1330-1335: ill

A model-based LQR control of an obstacle avoidance maneuver of a self-driving car

Astrov, Igor; Udal, Andres; Pikner, Heiko; Malayjerdi, Ehsan 2022 IEEE 20th Jubilee World Symposium on Applied Machine Intelligence and Informatics (SAMI): Poprad, Slovakia, 2-5 March 2022 2022 / p. 473-478: ill https://doi.org/10.1109/SAMI54271.2022.9780755

Modeling and simulation of multirate control systems for vehicles: practical approach

Astrov, Igor 2012 https://www.amazon.com/Modeling-Simulation-Multirate-Control-Vehicles/dp/3659281395

Modelling and simulation of two-rate state-space models for stochastic multivariable continuous-time control systems Astrov, Igor; Rüstern, Ennu CSCS-12: 12th International Conference on Control Systems and Computer Science: proceedings: May 26-29, 1999, Bucharest, Romania. Vol. 1 1999 / p. 103-108

Modelling of multirate multivariable control systems: a state-space approach: thesis submitted to Tallinn Technical University in candidature for the degree of Doctor of Philosophy in Engineering

Astrov, Igor 2000 http://www.ester.ee/record=b1707861*est

Motion control of an autonomous surface vessel for enhanced situational awareness

Astrov, Igor; **Pikkov, Mihhail**; **Paluoja, Rein** World Academy of Science, Engineering and Technology. International journal of mechanical, industrial science and engineering 2013 / p. 1203-1208 : ill

Motion control of TUAV having eight rotors for enhanced situational awareness

Astrov, Igor; Pedai, Andrus World Academy of Science, Engineering and Technology 2011 / p. 694-701 : ill https://zenodo.org/records/1070115

Motion control of vectored thrust aerial vehicle for enhanced situational awareness

Astrov, Igor; **Pikkov, Mihhail**; **Paluoja, Rein** Mathematical applications in science and mechanics: [proceedings of the conferences: Dubrovnik, Croatia, June 25-27, 2013] 2013 / p. 59-64: ill

Motion control of X4-flyer for enhanced situational awareness

Astrov, Igor; **Pedai, Andrus** Latest trends on systems : 14th WSEAS International Conference on Systems : Greece, July 22-24. Vol. 1 2010 / p. 123-128: ill

Multirate approaches for engineering applications: computational strategies

Astrov, Igor 2015 https://www.ester.ee/record=b4533492*est

Multirate depth control of an AUV by neural network model reference controller for enhanced situational awareness Astrov, Igor; Gordon, Boris Recent researches in applied information science: proceedings of the 5th WSEAS World Congress on Applied Computing Conference (ACC '12): proceedings of the 1st International Conference on Biologically Inspired Computation (BIC '12): University of Algarve, Faro, Portugal, May 2-4, 2012 2012 / p. 32-37: ill http://www.wseas.us/e-library/conferences/2012/Algarve/BICA/BICA-04.pdf

Multirate depth control of an AUV by neural network model reference controller for enhanced situational awareness [Electronic resource]

Astrov, Igor; **Gordon, Boris** Proceedings of the International Conferences: Recent Researches in Applied Information Science: [Faro, Portugal, May 2-4, 2012] 2012 / p. 32-37: ill [CD-ROM]

Multirate depth control of an AUV by neural network predictive controller for enhanced situational awareness [Electronic resource]

Astrov, Igor; **Pedai, Andrus** 5th International Symposium on Computational Intelligence and Intelligent Informatics (ISCIII 2011): Floriana, Malta, September 15-17, 2011: proceedings 2011 / p. 47-52 [CD-ROM]

Multirate depth control of an AUV by neurocontroller for enhanced situational awareness

Astrov, Igor; Pedai, Andrus Advances in Computational Intelligence, Man-Machine Systems and Cybernetics 2010 / p. 21-26 : ill

Multi-rate expert systems in supply chain simulation for telecommunication industry [Electronic resource]

Pedai, Andrus; **Astrov, Igor** WiCOM 2008 CD-ROM proceedings : 4th International Conference on Wireless Communications, Networking and Mobile Computing (WiCOM 2008) : Dalian, China, October 12-17, 2008 2008 / [4] p. : ill. [CD-ROM]

Multirate neural control for AUV's increased situational awareness during diving tasks using stochastic model

Astrov, Igor; Pedai, Andrus Proceedings of the World Academy of Science, Engineering and Technology 2010 / p. 337-343 : ill

Multirate neural control for AUV's increased situational awareness during diving tasks using stochastic model [Electronic resource]

Astrov, **Igor**; **Pedai**, **Andrus** ICMISE 2010 CD-ROM proceedings: International Conference on Machine Intelligence and Systems Engineering: Singapore, December 18-20, 2010 2010 / p. 214-220 [CD-ROM]

Nanotechnology in military development

Pedai, Andrus; **Astrov, Igor** World Academy of Science, Engineering and Technology. International journal of chemical, nuclear, materials and metallurgical engineering 2014 / p. 1121-1125 : ill

Neural network control of vehicles: modeling and simulation

Astrov, Igor 2022 https://doi.org/10.52305/GXGD6357 https://www.ester.ee/record=b5642329*est

Neural network motion control of VTAV by NARMA-L2 controller for enhanced situational awareness

Astrov, Igor; **Berezovski, Natalya** International journal of computer, electrical, automation, control and information engineering 2015 / p. 1784-1788 : ill http://scholar.waset.org/1999.4/10001781

Neural predictive tracking control of catamaran model sailboat for situation awareness applications

Astrov, Igor; **Udal, Andres** INES 2020 : IEEE 24th International Conference on Intelligent Engineering Systems, July 8-10, 2020, Reykjavik, Iceland : proceedings 2020 / p. 153-158 : ill https://doi.org/10.1109/INES49302.2020.9147126

Noisy voice pattern recognition by three-rate hybrid neural network

Astrov, Igor; Tatarly, S.; Tatarly, S. Advances in electrical and computer engineering 2006 / 2, p. 35-38 https://aece.ro/abstractplus.php?year=2006&number=2&article=7

An optimal control method for an autonomous surface vessel for environment monitoring and cargo transportation applications

Astrov, Igor; **Udal, Andres**; **Mõlder, Heigo** 2021 25th International Conference Electronics : Proceedings of the 25th International Conference : ELECTRONICS 2021, Kaunas University of Technology, 14th–16th June, 2021, Palanga, Lithuania 2021 / 6 p https://doi.org/10.1109/IEEECONF52705.2021.9467483

A private cloud for data mining education

Koschel, Arne; Heine, Felix; **Astrova, Irina**; **Astrov, Igor** 2018 Sixth International Conference on Enterprise Systems: ES 2018: 1–2 October 2018, Limassol, Cyprus: proceedings 2018 / p. 129-133: ill http://doi.org/10.1109/ES.2018.00027

Proactive approach to innovation management

Pedai, Andrus; **Astrov, Igor** World Academy of Science, Engineering and Technology. International journal of social, education, economics and management engineering 2014 / p. 2241-2245 : ill

Processing of blurred image by the two-rate hybrid Kohonen neural network

Astrov, Igor; Tatarlõ, Svetlana; **Rüstern, Ennu** Proceedings of 2nd IASTED International Multi-Conference on Automation, Control, and Information Technology - Signal and Image Processing 2005 / p. 30-35

Processing of distorted fingerprints with use of three-rate hybrid kohonen neural networks

Astrov, Igor; Tatarly, S.; Tatarly, S.; **Rüstern, Ennu** Proceedings of the 8th International Conference on Signal Processing : ICSP'06 : Guilin, China, November 16-20, 2006 2006 / p. 2383-2386 https://ieeexplore.ieee.org/document/4129338

Processing of distorted fingerprints with use of three-rate hybrid kohonen neural networks [Electronic resource]

Astrov, Igor; Tatarly, S.; **Rüstern, Ennu** Proceedings of the 8th International Conference on Signal Processing: ICSP'06: Guilin, China, November 16-20, 2006 2006 / [4] p. [CD-ROM] https://ieeexplore.ieee.org/document/4129338

Processing of two-dimensional data with use of two-rate Kohonen's neural networks [Electronic resource]

Astrov, Igor; Tatarlõ, Svetlana; **Rüstern, Ennu** IEEE Canadian Conference on Electrical and Computer Engineering 2005 / p. 949-952 [CD-ROM] https://ieeexplore.ieee.org/document/1557133

RESTfulness of APIs in the wild

Koschel, Arne; Blankschyn, Maximilian; Schulze, Kevin; Schöner, Dominuk; **Astrova, Irina**; **Astrov, Igor** 2019 IEEE World Congress on Services: IEEE SERVICES 2019, 8–13 July, 2019 Milan, Italy: proceedings 2019 / art. 8817208; p. 382-383: ill https://doi.org/10.1109/SERVICES.2019.00114

Simulation of missile autopilot with two-rate hybrid neural network system

Astrov, Igor; Tatarly, Sergei; Tatarly, Svetlana Advances in electrical and computer engineering 2007 / 1, p. 18-22 : ill https://www.researchgate.net/publication/41391566 Simulation of Missile Autopilot with Two-Rate Hybrid Neural Network System

Simulation of neural network and fuzzy logic hybrid control for two-rate stochastic model of an experimental aircraft Astrov, Igor; Rüstern, Ennu Proceedings of the Asian Simulation Conference - 5th International Conference on System Simulation and Scientific Computing (ICSC 2002), Shangai, China, November 3-6, 2002. Vol. 2 2002 / p. 852-856

Simulation of noise-cancelling in the cocpit of an aircraft using two-rate hybrid neural network

Astrov, Igor; Tatarly, Sergei; Tatarly, Svetlana Advances in electrical and computer engineering 2007 / 2, p. 7-10 https://www.researchgate.net/publication/41391551_Simulation_of_Noise-Cancelling_in_the_Cockpit_of_an_Aircraft_Using_Two-Rate_Hybrid_Neural_Network

Simulation of three-rate decentralized LQG control for Lockheed L1011 aircraft

Astrov, Igor; Rüstern, Ennu Control and Applications: lasted International Conference 2001 2001 / p. 225-230

Simulation of three-rate neural and neuro-fuzzy hybrid control for the multidimensional stochastic model of a fighter aircraft

Astrov, Igor; Pedai, Andrus; Rüstern, Ennu SCI 2004: the 8th World Multi-Conference on Systemics, Cybernetics and Informatics: July 18-21, 2004, Orlando, Florida, USA. Vol. 8: proceedings 2004 / p. 351-356

Simulation of three-rate neural network control for stochastic model of a fighter aircraft

Astrov, Igor CCECE 2003 - Canadian Conference on Electrical and Computer Engineering: Toward a Caring and Humane Technology: May 4th to 7th 2003, Montreal, Canada: proceedings. Vol. 3 2003 / p. 1711-1714: ill

Simulation of two-rate adaptive hybrid control with neural and neuro-fuzzy networks for stochastic model of an experimental aircraft

Astrov, Igor; **Pedai, Andrus**; **Rüstern, Ennu** Proceedings of the International Conference on Cybernetics and Information Technologies, Systems and Applications (CITSA 2004) [and] 10th International Conference on Information System Analysis and Synthesis (ISAS 2004): Orlando, Florida, USA. Vol. 2 2004 / p. 295-300

Simulation of two-rate adaptive hybrid control with neural and neuro-fuzzy networks for stochastic model of missile autopilot

Astrov, Igor; **Pedai, Andrus**; **Rüstern, Ennu** WCICA 2004 : Fifth World Congress on Intelligent Control and Automation : June 15-19, 2004, Hangzhou, China : conference proceedings. Vol. 3 2004 / p. 2603-2607 : ill

Simulation of two-rate adaptive neural network and fuzzy logic hybrid control for stochastic model of an experimental aircraft

Astrov, Igor; **Pedai, Andrus**; **Rüstern, Ennu** Canadian Conference on Electrical and Computer Engineering 2004 = Conference canadienne en genie electrique et informatique : May 2-5, 2004, Fallsview Sheraton, Niagara Falls, Canada : proceedings. Vol. 1 2004 / p. 125-128 : ill

Simulation of two-rate hybrid control for nonlinear stochastic model of a diesel engine actuator

Astrov, **Igor** Advances in electrical and computer engineering: journal of the Faculty of Electrical Engineering, Stefan Cel Mare University, Suceava, Romania 2003 / 1(19), p. 72-83

Simulation of two-rate hybrid control for stochastic model of missile autopilot

Astrov, **Igor**; **Rüstern**, **Ennu** Proceedings of the International Conference on Computer, Communication and Control Technologies (CCCT'03): Sheraton World Resort, Orlando, Florida, USA, July 31-August 2, 2003. 3 2003 / p. 150-154

Simulation of two-rate neural network control for stochastic model of an experimental aircraft

Astrov, Igor; Tatarly, S.; Tatarly, S. Advances in electrical and computer engineering 2006 / 1, p. 75-83 https://citeseerx.ist.psu.edu/document?repid=rep18type=pdf&doi=33c1d222839a8b7ec32792cb70adc3812139332a

Simulation of two-rate neural network control for stochastic model of missile autopilot

Astrov, Igor; Tatarly, S.; Tatarly, S. Proceedings of the 6th WSEAS International Conference on Systems Theory and Scientific Computation: ISTASC'06: Elounda, Agios Nikolaos, Crete Island, Greece, August 18-20, 2006 2006 / p. 169-174

Simulation of two-rate neural network control stochastic model of missile autopilot

Astrov, Igor; Tatarly, S.; Tatarly, S. WSEAS transactions on systems 2006 / 11, p. 2536-2541

Simulink/MATLAB based comparison of neural and basic tracking control for an autonomous surface vessel for situation awareness applications

Astrov, Igor; **Udal, Andres**; **Pedai, Andrus**; **Sell, Raivo** 2019 IEEE 19th International Symposium on Computational Intelligence and Informatics and 7th IEEE International Conference on Recent Achievements in Mechatronics, Automation, Computer Sciences and Robotics (CINTI-MACRo) 2019 / p. 000105 - 000110 : ill

Single-Rate versus Three-Rate Neural Assisted Control Approaches for Coaxial Rotor Ducted Fan TUAV for Situation Awareness Applications

Pedai, Andrus; **Astrov, Igor**; **Udal, Andres**; **Sell, Raivo** 2019 IEEE International Systems Conference (SysCon 2019), Orlando, FL, USA, April 8-11, 2019 2019 / p. 457–463 : ill https://doi.org/10.1109/SYSCON.2019.8836871

Situational awareness based flight control of a drone [Electronic resource]

Astrov, Igor; **Pedai, Andrus** 2011 IEEE International Systems Conference (SysCon 2011): Montreal, Quebec, Canada, April 4-7, 2011: proceedings 2011 / p. 574-578 [CD-ROM]

Situational awareness based flight control of a four-rotor type UAV

Astrov, Igor; Pedai, Andrus Recent Researches in Automatic Control: 13th WSEAS International Conference on Automatic Control, Modelling and Simulation (ACMOS'11): Lanzarote, Canary Islands, Spain, May 27-29, 2011 2011 / p. 63-68

Situational awareness based flight control of a three-rotor mini-aircraft

Astrov, Igor; Pedai, Andrus New aspects of automatic control, modelling and simulation 2010 / p. 71-76

Situational awareness based neural flight control of a coaxial rotor/ducted-fan helicopter

Astrov, Igor; **Pikkov, Mihhail**; **Paluoja, Rein** Recent advances in systems science: proceedings of the 17th International Conference on Systems (part of CSCC '13): Rhodes Island, Greece, July 16-19, 2013 2013 / p. 54-59: ill

Situational awareness based on neural control of an autonomous helicopter during hovering manoeuvres

Astrov, Igor; **Pedai, Andrus** Proceedings of 5th International Conference on Electrical and Computer Engineering (ICECE 2008): Dhaka, Bangladesh, December 20-22, 2008 2008 / p. 857-860

Target tracking by neural predictive control of autonomous surface vessel for environment monitoring and cargo transportation applications

Astrov, Igor; **Udal, Andres**; **Roasto, Indrek**; **Mölder, Heigo** 2020 17th Biennial Baltic electronics conference, Tallinn, Estonia, October 6-8, 2020 : proceedings 2020 / 4 p https://doi.org/10.1109/BEC49624.2020.9277115

The discrete control of two-rate nonlinear multivariable continuous-time systems

Astrov, Igor; Rüstern, Ennu Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1997 / 3, p. 197-208

The state-space description of two-rate nonlinear multivariable discrete systems

Astrov, Igor; Rüstern, Ennu Proceedings of the Estonian Academy of Sciences. Physics. Mathematics 1997 / 3, p. 187-196

Three-rate neural control of TUAV with coaxial rotor and ducted fan configuration for enhanced situational awareness Astrov, Igor; Pedai, Andrus 2012 International Conference on Control, Automation and Information Sciences (ICCAIS): [Ho Chi Minh City, Vietnam, November 26-29, 2012: proceedings] 2012 / p. 78-83: ill https://ieeexplore.ieee.org/document/6466634

A trajectory control method for a strongly underactuated spherical underwater surveillance robot

Astrov, **Igor**; **Udal**, **Andres**; **Mõlder**, **Heigo** 2021 IEEE 25th International conference on intelligent engineering systems (INES), 7-9 July 2021 : conference proceedings 2021 / p. 43–48 https://doi.org/10.1109/INES52918.2021.9512931

Two-rate aggregative model in state space for a class of nonlinear multivariable stochastic continuous-time control systems

Astrov, Igor; **Rüstern, Ennu** Proceedings of the 12th International Conference on Systems for Automation of Engineering and Research (SAER'98): 19-20 September 1998, Varna - St. Konstantin resort, Bulgaria 1998 / p. 34-38

Two-rate LQG control of VTAV for enhanced situational awareness

Astrov, **Igor** Recent advances in circuits, systems, signal processing and communications: proceedings of the 8th WSEAS International Conference on Circuits, Systems, Signal and Telecommunications (CSST '14): Tenerife, Spain, January 10-12, 2014 2014 / p. 163-168: ill

Two-rate motion control of VTAV by NARMA-L2 controller for enhanced situational awareness [Electronic resource] Astrov, Igor 2016 39th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO): May 30-June 3, 2016, Opatija, Croatia: proceedings 2016 / p. 1126-1131: ill. [CD-ROM] https://doi.org/10.1109/MIPRO.2016.7522309

Two-rate neural control of TUAV with coaxial rotor and ducted fan configuration for enhanced situational awareness Astrov, Igor; Pedai, Andrus; Gordon, Boris Proceedings of 9th International Conference 2012 ELEKTRO: May 21 - 22, 2012, Žilina-Rajecké Teplice, Slovakia 2012 / p. 159-164: ill https://ieeexplore.ieee.org/document/6225630

Two-rate neural predictive control of coaxial rotor/ducted-fan TUAV for enhanced situational awareness Astrov, Igor; Berezovski, Natalya; Pikkov, Mihhail; Kimlaychuk, Vadim International Conference on Information Society (i-Society 2015): London, UK, November 9-11, 2015 2015 / p. 127-132: ill http://dx.doi.org/10.1109/i-Society.2015.7366873

Two-rate neuro-fuzzy hybrid control for model of an experimental aircraft

Astrov, **Igor**; **Rüstern**, **Ennu** Automation, Control and Information Technology: proceedings of the IASTED International Conference: June 10-13, 2002, Novosibirsk, Russia 2002 / p. 180-185

Two-rate state-space continuous-time models for subsystems of stochastic multivariable control systems Astrov, Igor; Rüstern, Ennu Proceedings of the 13th International Conference "Systems for Automation of Engineering and

Astrov, Igor; Rustern, Ennu Proceedings of the 13th International Conference "Systems for Automation of Engineering and Research" (SAER'99): Varna, Bulgaria, September 18-19, 1999 1999 / p. 49-53

Two-rate state-space mathematical models for stochastic multivariable continuous-time control systems and their simulation (MMAR'2000)

Astrov, Igor; **Em, Juri**; **Rüstern, Ennu** Proc. 6th International Conf. on Methods and Models in Automation and Robotics 2000 / p. 471-476

Wind force model and adaptive control of catamaran model sailboat

Astrov, Igor; Udal, Andres; Mõlder, Heigo; Jalakas, Tanel; Möller, Taavi 2022 8th International Conference on Automation, Robotics and Applications, ICARA 2022 2022 / p. 202-208 : ill https://doi.org/10.1109/ICARA55094.2022.9738524