Curriculum vitae

Personal information

Full Name: Balabanov Aleksey Nikolayevich
Date of Birth: 27 December 1983
Nationality: Russian

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Education and qualification:
- April 2014 - Ph.D. in Systems and processes of control. PhD thesis Application matrix algebraic equation Riccaty linear reduction methods for control systems optimization problems.
- June 2006 - MSc in System Engineering. Sevastopol National Technical University, Ukraine. Department of the Technical Cybernetics.
- June 2005 - BSc in Automatic systems and control. Sevastopol National Technical University, Ukraine. Department of the Technical Cybernetics.

Fields of Research:
Solutions of LQ, LQG, H2, H-infinity optimization problems. Numerical solutions of matrix algebraic Riccati equation.

Work experience
- 15.01.2014 – up to present. Senior Lecturer, Department of Technical Cybernetics, Sevastopol National Technical University. Teaching of "Algorithms and Data Structures", "Electromagnetic components and systems".
- 01.09.2007 – 31.12.2013. Assistant, Department of Technical Cybernetics, Sevastopol National Technical University. Teaching of "software development and information support for control systems", "optimal and adaptive systems", "algorithmic languages and programming" and others.
- 01.09.2009 – 31.12.2012. Junior science researcher at the Department of Technical Cybernetics.

Computer skills and competences
Programming Languages: MatLab, Object Pascal (advanced); JavaSE1.6, C/C++,SQL, HTML, Php (basic). IDEs: MatLab, Borland Delphi 7, Borland Builder 6, Eclipse. DBMS: SQL Server 2000, Firebird 2.1. Operating Systems: Windows 97-7.

Language skills:
- Russian (Native)
- Ukrainian(Fluent)
- English (intermediate level – reading, business correspondence, conversation)

Participation in scientific projects
- Mathematical methods of research and design of control systems functionally complex processes and objects. Sevastopol, 2009.
- Analytical design of control systems by methods of direct and inverse problems of dynamics. Sevastopol, 2010 - 2012.

- Development and identification of mathematical models of actuators of object AK-630M. Sevastopol, 2013.

Participation in Grants01.09.2014 – 31.12.2014. Grant from р_юг_а «SOUTH RUSSIA» РФФИ on " Automation of thermohaline measurements of the marine environment by use of controlled profiling drifters".

List of selected Publications (Auto translated references)
- Barabanov A.T. Concerning to the application of Bass equation for construction of algebraic Riccati equation stabilizing solution / A.T. Barabanov, **A.N. Balabanov** // Vestnik SevGTU. Ser. Process Automation and Control: scientific digest - Sevastopol, 2007. - Vol. 83. – 183-186 p.
- Barabanov A.T. Construction of the algebraic Riccati equation stabilizing solutions on a frequency response of a control object. / A.T. Barabanov, **A.N. Balabanov** // Vestnik SevGTU. Ser.Optimization of production processes: scientific digest - Sevastopol, 2009. - Vol. 11. - 5-9p.
- Barabanov A.T. Factorization of a Hamilton matrix characteristic polynomial in the solution of linear quadratic optimization // A.T. Barabanov, **A.N. Balabanov** // Vestnik SevGTU. Ser.Optimization of production processes: scientific digest - Sevastopol, 2011. - Vol. 13. - 175–179 p.
- Barabanov A.T. Computation of elementary integral quadratic functionals with frequency method in solving of linear-quadratic optimization problem by resolvent method / A.T. Barabanov, **A.N. Balabanov** // Vestnik SevGTU. Ser. Process Automation and Control: scientific digest - Sevastopol, 2012. - Vol. 125. - 173-178 p.

- **Balabanov A.N.** Application of the resolvent method to $\mathbf{H}^{\infty}$ – optimization. / A.N. Balabanov // scientific digest. P.S. Nakhimov navy academy. - Sevastopol, 2012. - Issue 1 (9). - 44-50 p.