# **CURRICULUM VITAE**

#### PERSONAL DETAILS - Valeria Bondarenko

Residential Address: La résidence universitaire Jean Meygret, 9 rue Professeur Pierre

Marion, 69005, Lyon, France

Mobile: +330785414501; Date of Birth: 16 October 1986

Nationality: Ukrainian

### **EDUCATION HISTORY**

2010-2015: National Technical University of Ukraine "KPI", Institute of Applied System

Analysis, graduate school

2006-2009 National Technical University of Ukraine "KPI", Institute of Applied System

**Analysis** 

Degree: Master of Science in Applied Mathematics

Major: System Analysis and Control

2004-2006 National Technical University of Ukraine "KPI", Institute of Applied System

Analysis

Degree: Bachelor of Science in Applied Mathematics

Major: System Analysis and Control

2001-2004: College of Applied Mathematics at the Institute of Applied System Analysis

# **WORK EXPERIENCE**

2006-2007: Research assistant, National Technical University of Ukraine "KPI", Department of Applied Mathematics, National Academy of Sciences of Ukraine.

2007-2010: Economist-Analyst at the Joint Stock Company the State Export-Import Bank of Ukraine (JSC Ukreximbank)

2010-2014: Doctoral assistant, National Technical University of Ukraine "KPI", Institute of Applied System Analysis, National Academy of Sciences of Ukraine.

12.2014-08.2016: Research assistant, National Technical University of Ukraine "KPI", Research Institute of Information Processes, National Academy of Sciences of Ukraine.

09.2016-06.2017: mobility, Institut de recherche en Communications et Cybernétique de Nantes IRCCyN, Ecole Centrale de Nantes

09.2017-11.2017: Research assistant, University of Beira, Covilha;

11.2017-05.2019- Research assistant within the field of macroeconomics, public policy and econometrics at The University Grenoble Alpes

# **SKILLS AND CERTIFICATES**

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### **Research interests:**

- Econometrics and Time Series Analysis
- Control theory
- Modeling of Financial Securities Dynamics by means Diffusion Models (Various Diffusion Components of the Model)
- Applied Statistics
- Optimal taxation
- Differential equations
- macroeconomics

- tax policy
- optimization

### Teaching activity:

Course "Probability and Statistics for foreign students"-2017, Ecole Centrale de Nantes

# **Computer Skills:**

- Windows
- Matlab
- Tex
- Eviews
- C++
- Pascal
- R

# **Language Skills:**

- Ukrainian and Russian (native speaker),
- English (C2)
- German (B2)
- French (C1)

### Awards:

- Cisco Certificate 2007
- 2013-2014:scholarship" Studienstiftung des Abgeordnetenhauses von Berlin".
- 2016:Research intership, Lameta, Montpellier

# **REFEREES**

Prof. Dr. Petro Bidyuk

National Technical University of Ukraine

Institute of Applied System Analysis

Peremogy Prospect, 37 Kiev, Ukraine

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E-mail: pbidyuke@gmail.com

Prof. Dr. Andrey Ilienko

National Technical University of Ukraine

**Department of Analysis and Probability** 

Peremogy Prospect, 37

Kiev, Ukraine

03056

Email: an.ilienko@gmail.com

# **Publications**

- 1. P. Bidyuk, V. Bondarenko. About the model of financial data, Journal of Automation and Information Sciences, Volume 43, 2011, Issue 7, pp. 76-81.
- 2. V. Bondarenko. Model of financial data as integral of diffusion process, Journal of Automation and Information Sciences, Volume 43, 2011, Issue 10, pp. 64-71.
- 3. V. Bondarenko. The iterative algorithm for parameters estimation of fractional Brownian motion, Journal of Automation and Information Sciences, Volume 44, 2012, Issue 7, pp. 62-68.
- 4. V. Bondarenko. Approximation of the time series by fractional Brownian motion, Journal of Automation and Information Sciences, Volume 45, 2013, Issue 6, pp. 82-86.
- 5. V. Bondarenko. The forecast of time series by approximating the fractional Brownian motion, Journal of System Research and Information Technologies, 2013, Issue 4, pp. 80-88.
- 6. V. Bondarenko. Checking the Quality of Approximation of the Time Series by Fractional Brownian Motion, , Journal of Automation and Information Sciences, Volume 46, 2014, Issue 6, pp. 77-84.
- 7. V. Bondarenko. The fractional Brownian motion: the estimation and approximation of time series, Journal of Applied & Computational Mathematics, Volume 4, Issue 6, 2015.
- 8. V. Bondarenko. The power approximation of the time series with using fractional Brownian motion, Journal of Applied & Computational Mathematics, submitted for publication, 2015.

- 9. V.G.Bondarenko, V.Bondarenko.The model of real data constructing using fractional Brownian motion, accepted in International Journal of Swarm Intelligence and Evolutionary Computation.
- 10. V. Bondarenko, V.G.Bondarenko, K.Truskovskiy. Forecasting of time data with using fractional Brownian motion, accepted in Chaos, Solitons and Fractals: the interdisciplinary journal of Nonlinear Science, and Nonequilibrium and Complex Phenomena.
- 11.V.Bondarenko,I.Taralova. Classification method of mixed chaotic/stochastic data, has been sent to Physica D (Nonlinear Phenomena).
- 12. V Bondarenko. About calculation the optimal labor time in the Mirrlees model (under review).

# **Selected Presentations and Conferences**

- 2011, February 22-25, International Scientific Conference of Students, and Young Scientists "Theoretical and applied aspects of cybernetics", Ukraine.
- 2011, June 1-3, SAIT System Analysis and Information Technologies, Ukraine.
- 2012, March 14–16, III International scientific conference "System Analysis. Informatics. Control", Ukraine.
- 2013, March 13–16, IV International scientific conference "System Analysis. Informatics. Control", Ukraine.
- 2012, April 9-11, VI International Scientific and Practical Conference of Students, PhD Students and Young Scientists "Modern Problems of Applied Statistics, Industrial, Financial and Actuarial Mathematics", Ukraine.

2012, March 12–16, III scientific-Practical Conference, "Informatics and Systems sciences, Ukraine.

2013, March 12–16, IV scientific-Practical Conference, "Informatics and Systems sciences, Ukraine.

2014, March 13–15, V scientific-Practical Conference, "Informatics and Systems sciences, Ukraine.

2012, April 19-21, XIV INTERNATIONAL SCIENTIFIC CONFERENCE devoted to Academician Mykhailo KRAVCHUK, Ukraine.

2012, September 20-22, XXI International Conference on Automatic Control, Ukraine.

2013, April 19-20, International Scientific and Practical Conference "Mathematics in the Modern Technical University", Ukraine.

2014, May 22, Presentation at the Department of Statistics, European University Viadrina, Frankfurt(Oder), Germany.

2014, July 24-26, International Workshop Non-and Semiparametric Volatility and Correlation models, Paderborn, Germany.

2014, September 11, The presentation of research topic, Institute of Landscape Ecology and Resources Management, Justus-Liebeg-University of Giessen, Germany.

2015, March 4, The presentation of research topic, Department of computer engineering, National Technical University of Ukraine "KPI".

2015, May 10, The presentation of research topic, Institute of Applied System Analysis, National Technical University of Ukraine "KPI".

2016, February 17, The presentation of dissertation topic, Department of mathematics, University of Toulouse, France.

2016, April 7, The presentation of dissertation topic, Lameta, Department of Economics, University of Montpellier, France.

ICMCMSE 2016: 18th International Conference on Mathematical and Computational Methods in Science and Engineering, 20th of June 2016, Paris.

II INTERNATIONAL CONFERENCE "Innovative approaches and modern science"

The Workshop - Spatial Statistics and Image Analysis in Biology, Rennes (25-27th of May 2016)

Workshop: Forecasting and Financial Markets, Erasmus School of Economics, Rotterdam, 10th of June 2016

IPACS conferences are Physics and Control, June 2017.

2017, May 3, The presentation of dissertation topic, School of Veterinary of Toulouse.

2017,May 8, The Project of Rila, FORECASTING TIME SERIES OF DATA FOR POWER CONSUMPTION IN DIFFERENT BUILDINGS BY USING THE FRACTIONAL BROWNIAN MOTION,Sophia,Bulgaria.

July 2017, Noma 2017, Classification method of mixed chaotic/stochastic data.

July 2017, Physcon, The algorithm for the analysis of combined chaotic-stochastic processes.

July 2018, presentation at The University Grenoble Alpes, International Network for the Study of Tax Incentives and Redistribution.