Curriculum Vitae

Name: Dr. Alona Zharova

Address: Humboldt-Universität zu Berlin, School of Business and Economics,

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Personal Status: married, two children (maternity leaves: 10/2018 – 02/2020, 08/2021 – 12/2022)

Languages: Ukrainian (native), Russian (native), German (fluent), English (fluent)

Professional Experience

since 04/2018	Postdoctoral Researcher (wissenschaftliche Mitarbeiterin), Chair of Information Systems, School of Business and Economics, Humboldt-Universität zu Berlin (HU Berlin)
02/2018 – 03/2018	Research stay at the National University Singapore (NUS), Department of Statistics & Applied Probability, Faculty of Science
06/2014 – 03/2018	Research Associate (wissenschaftliche Mitarbeiterin), Ladislaus von Bortkiewicz Chair of Statistics, School of Business and Economics, HU Berlin
01/2017 – 03/2018	Managing Director, International Research Training Group 1792 "High Dimensional Nonstationary Time Series", HU Berlin Finance management (0,5 Mio. € p.a.), controlling, HR management (20 people), team management (4 people), elaboration of funding proposals
04/2014 – 12/2016	Managing Director, Collaborative Research Center 649 "Economic Risk", HUB Finance management (2 Mio. € p.a.), controlling, HR management (100 people), team management (5 people), elaboration of funding proposals, business process optimization, introduction of a research-led forecast-based financial management – Increase from 83% to 99% in the efficiency of the allocated third-party funds
10/2013 - 03/2014	Research stay at the HU Berlin, Ladislaus von Bortkiewicz Chair of Statistics, School of Business and Economics
10/2011 – 04/2014	Research Associate (wissenschaftliche Mitarbeiterin), Chair of Management and mathematical modelling of market processes, School of Economics and Business Administration, Odessa I.I. Mechnikov National University, Ukraine Research in "Agent-based modelling in IT project management"
03/2011 – 10/2011	Deputy Manager , Travel company "Vilkovo-Tour", Ukraine Product development, data analytics, business process analysis, introduction of the forecast-based planning – cost reduction in purchasing and marketing

Academic Education

06/2014 – 03/2018	Promotion (Ph.D.) in Statistics and Econometrics, HU Berlin Dissertation: Measures of University Research Output Advisors: Wolfgang Karl Härdle and Stefan Lessmann Grade: "summa cum laude"
09/2010 – 06/2011	Master's Degree (Specialist) in Management of Organizations, Odessa I.I. Mechnikov National University, Ukraine Diplom Thesis: <i>Measuring the efficiency of marketing management using quantitative models</i> Grade: "with distinction", GPA 5.00 = German 1.0
09/2006 – 06/2010	Bachelor's Degree in Management, Odessa I.I. Mechnikov National University, Ukraine Grade: "with distinction", GPA 4.85 = German 1.15
06/2006	Abitur, focus in mathematics and economics, Reni Gymnasium, Ukraine Grade: "with distinction", GPA 11.85 = German 1.06

Teaching Experience

SS 2023	Strategie, Organisation und Information Technology, Lecture & Exercise (BSc, ca. 400 students), <i>HU Berlin</i>
SS 2023	Introduction to Programming in Java, Lecture & Exercise (BSc, ca. 200 students), HU Berlin
SS 2023	Seminar IT Security and Privacy (MSc, 40 students), HU Berlin
WS 2022/2023	Seminar Information Systems, Implementation project (MSc, 24 students), <i>HU Berlin</i> Seminar in WS2022/2023 – in cooperation with Volkswagen AG, Data & AI Products Group
WS 2022/2023	Research Seminar Information Systems (Ph.D. & selected MSc theses), HU Berlin
SS 2021	Research Seminar Information Systems (Ph.D. & selected MSc theses), HU Berlin
SS 2021	Seminar Applied Predictive Analytics (MSc, 24 students), HU Berlin
SS 2021	Introduction to Programming in Java, Lecture & Exercise (BSc, ca. 200 students / 150 exams), <i>HU Berlin</i> (Exercises available in YouTube, <u>Link</u>)
WS 2020/2021	Seminar Information Systems, Implementation project (MSc, 24 students), HU Berlin
WS 2020/2021	Research Seminar Information Systems (Ph.D. & selected MSc theses), HU Berlin
WS 2020/2021	Business Analytics and Data Science, Exercises (MSc, ca. 150 students/ 90 exams), <i>HU Berlin</i>
SS 2020	Grundlagen der Programmierung in Java, Übung (BSc, ca. 150 students / 100 exams), HU Berlin

SS 2020	Research Seminar Information Systems (Ph.D. & selected MSc theses), HU Berlin
SS 2020	Seminar Wirtschaftsinformatik (BSc, 24 students), HU Berlin
SS 2019	Management Simulation, Simulation Game (BSc & MSc, 35 students) International Summer School in Economics and Management (ISSEM) of the HU Berlin in Havana, Cuba
SS 2018	Grundlagen der Programmierung in Java, Vorlesung (BSc, ca. 150 students / 120 exams), HU Berlin
SS 2018	Seminar Wirtschaftsinformatik, Implementationprojekt (BSc, 24 students), HU Berlin
SS 2017, SS 2016	Management Simulation, Simulation Game (BSc & MSc, 30 students) International Summer School in Economics and Management (ISSEM) of the HU Berlin in Havana, Cuba
WS 2016/2017	Statistics II, Exercise (BSc, 20 students), HU Berlin
SS 2015	Management Simulation, Simulation Game (BSc & MSc, 30 students) International Summer School in Economics and Management (ISSEM) of the HU Berlin in Havana, Cuba
WS 2012/2013	Forecasting for Business Applications (MSc) Odessa I.I. Mechnikov National University (Ukraine)

Third-party funds Experience

10/2023	Individual International Connections Grant for a research stay at the Australian National University (ANU), "Nudging Energy-Efficient Behavior in Private Households through the Recommendation Systems", by the DFG through the Strategic Partnerships Program of the Excellence (6000 €)
03/2021 – 12/2023	Co-PI at the project "AI Marketer" financed by the Investitionsbank Berlin (IBB), Program for promoting Research, Innovations and Technologies (ProFIT), (296530 € in total)
11/2018 – 02/2020	Co-PI at the HU Berlin - NUS (National University Singapore) Joint Research Project in "Augmented Intelligence in Digital Society", by the DFG through the Strategic Partnerships Program of the Excellence (16500 € in total)
2017	Coordination of the application for prolongation of the International Research Training Group (IRTG) 1792 "High Dimensional Nonstationary Time Series" to the DFG (successful; approval for 4.5 years 2018-2022, 3.4 Mio. € in total)
2015 – 2016	Coordination of the application for a Collaborative Research Center "Digital Economy and Decision Analytics" to the DFG (decision "C")
2013	Individual grant of Erasmus Mundus BMU-MID for 6 months exchange mobility at the Humboldt-Universität zu Berlin (9000 €)

Professional Activities

Refereeing activities

- ICLR (International Conference on Learning Representations) within Tackling Climate Change with Machine Learning Workshop, Referee
- International Journal of Forecasting, Referee

Committee work

- Member of the Joint Commission for the Master program in Information Systems at the HU Berlin, since 2020
- Representative of the group of research associates at the Faculty Council (Fakultätsrat) of the School of Business and Economics, HU Berlin, 2018 – 2020
- Member of several Search committees: full professorship (W3) in Statistics at HU Berlin 2017, junior professorship (W1) in Applied Statistics at HU Berlin 2017, full professorship (W3) in Finance at HU Berlin 2017
- Scientific Member of 7 PhD committees, since 2018

Service

- Volunteer support for Ukrainian refuge researchers in Berlin, since 03/2022
- Advisor to a StartUp admi [End-to-End-Lösung, um Kommunen europaweit bei der Umsetzung von Klimaschutzmaßnahmen zu unterstützen], Berlin, since 01/2023
- Advisor to a StartUp Ecopeak [Digitale Antwort auf Klimawandel und Energiekrise], Berlin, since 07/2021
- Expert in the Deutsche Klima-Konsortium e.V. (DKK), since 2020
- Consultant to Vice President for Research and Research Service Centre of the HU Berlin (Data-driven decision support, research data analytics, evaluation of research performance, visualization of existing research collaborations), 2016 – 2019
- Member of the scientific advisory board of the first German-Cuban business incubator InCUBA.uhhu, joint project by Universidad de la Habana and HU Berlin, financed by the DAAD, since 2015
- Supervisor of 8 bachelor and 14 master theses, since 2020
- Career counseling for female students (BSc, MSc, and Ph.D.), since 2018

Conference and Short course organization

- IRTG 1792 Short course by **Jeffrey M. Wooldridge** (Michigan State University), 25–26/02/2019, Estimation of Treatment Effects
- IRTG 1792 Short course by **Matthew Harding** (University of California, Irvine), 01–04/06/2018, Applying Deep Learning and Machine Learning in Economics
- IRTG 1792 Short course by Dirk Tunger (Research Center Jülich), 26/04/2017, Bibliometric Analyses
- 11th conference of the Collaborative Research Center 649 Conference in Motzen, 2015
- Nobelpreisvorlesung at the HU Berlin, 2014
- 10th conference of the Collaborative Research Center 649 Conference in Motzen, 2014

Continuing Education

11/2022	Blended Learning – Kombination von asynchroner Lehre, virtueller Präsenzlehre und Präsenzlehre
11/2016	Rules of Good Scientific Practice
12/2015	Project Management
12/2015	Arbeitsrecht für Führungskräfte
02/2015	Genderkompetenz als Schlüsselqualifikation der Zukunft
02/2015	Plagiat, Datenmanipulation und Diebstahl geistigen Eigentums
02/2015	Tagung der Sprecherinnen und Sprecher geistes- und sozialwissenschaftliche Sonderforschungsbereiche
12/2014	Einführung in das Hochschulrecht, Internationales Hochschulrecht
12/2014	Ergebnisorientierte Moderation in Projekten
11/2014	Workshop Forschungsverbundmanagement – Interdisziplinäre Prozesse in Forschungsverbünden gestalten
11/2014	Zeit- und Projektplanung für Promotionsvorhaben
01/2014	Beantragung und Führung von Drittmittel

Invited talks

13.02.2020	Universidad de La Habana , Photovoltaic Lab, Havanna (CU): <i>Smart Home Technology and Smart Energy</i>
04.09.2018	Deutsches Zentrum für Hochschul- und Wissenschaftsforschung , DZHW (DE): <i>Is Scientific Performance a Function of Funds?</i>
08.05.2018	Brown Bag Seminar of the "Friedrich List" Faculty of Transport and Traffic Sciences, TU Dresden (DE): <i>Is Scientific Performance a Function of Funds?</i>
28.02.2018	National University of Singapore , Department of Statistics and Applied Probability, Singapore (SG): Measures of University Research Output and Resource Usage Efficiency
25.09.2017	Universidad de La Habana , Havanna (CU): <i>Statistische Analyse zum Ressourceneinsatz und Performanz in Forschungseinrichtungen</i>
15.03.2017	National Chung Hsing University, Kaohsiung (TW): An analysis of third-party expenses of university
14.03.2017	National Chiao Tung University , Hsinchu (TW): <i>Evaluating research performance of the collaborative research center</i>
13.03.2017	National Taiwan University , Taipei (TW): <i>Academic ranking scales in economics: prediction and imputation</i>

Conferences and Workshops

01 05.05.2023	ICLR 2023 Tackling Climate Change with Machine Learning Workshop: Activity-Based
	Recommendations for the Reduction of CO2 Emissions in Private Households (Link)
28.11. – 09.12.2022	NeurIPS 2022 Tackling Climate Change with Machine Learning Workshop: <i>Explainable Multi-Agent Recommendation System for Energy-Efficient Decision Support in Smart Homes</i> (Link)

15 – 16.11.2019	NUS Workshop on Research Metrics , National University Singapore, Singapore (SG), <i>Is Scientific Performance a Function of Funds?</i>
05. – 07.08.2019	Singapore Economic Review Conference 2019 (SERC), Singapore (SG): <i>Emergence of Trends in Economics</i>
20.09.2019	UHHU Research Workshop (Joint research workshop by Universidad de La Habana and HU Berlin), Havanna (CU): <i>Machine Learning Applications for Smart Home and Smart Energy</i>
15. – 17.06.2017	International Conference on Econometrics and Statistics (EcoSta 2017), Hong Kong (CN): A multivariate dynamic analysis of third-party funds
04. – 06.04.2017	Anwenderworkshop Bibliometrie, Forschungszentrum Jülich (DE): <i>Analyse der Drittmittelausgaben und Forschungsoutputs der Universität</i>
21.04.2011	XII. Conference "Modern management: models, strategies, technologies" of ORIPA NAPA under the President of Ukraine, Odessa (UA): Evaluation of efficiency of marketing management using forecasting models. 1st Place Award
22.04.2010	XI. Conference "Modern management: models, strategies, technologies" of ORIPA NAPA under the President of Ukraine, Odessa (UA): Strategic human resources management as a

Publications

Papers in peer-reviewed journals

Zharova A, Härdle WK, and Lessmann S (2023) Data-driven support for policy and decision-making in university research management: A case study from Germany. *European Journal of Operational Research*. In Press. https://doi.org/10.1016/j.ejor.2022.10.016 Quantlets in Github

key success factor for travel companies. 1st Place Award

Zharova A, Tellinger-Rice J and Härdle WK (2018). How to measure the performance of a Collaborative Research Center. *Scientometrics*. 117(2), pp 1023–1040. https://doi.org/10.1007/s11192-018-2910-8 Quantlets in GitHub

Papers currently in a peer-review process

Zharova A, Boer A, Knoblauch J, Schewina KI and Vihs J (2023). Explainable Multi-Agent Recommendation System for Energy-Efficient Decision Support in Smart Homes. *Environmental Data Science*. Revise & Resubmit

Working Papers / Preprints

Zharova A and Lee HE (2022) Understanding User Perception and Intention to Use Smart Home for Energy Efficiency: A Survey. *arXiv Preprint*. Code in GitHub. https://doi.org/10.48550/arXiv.2212.05019

Zharova A and Löschmann L (2022) Activity-Based Recommendations for Demand Response in Smart Sustainable Buildings. *arXiv Preprint*. Code in <u>GitHub</u>. https://doi.org/10.48550/arXiv.2212.05173

Zharova A and Scherz A (2022) Multistep Multiappliance Load Prediction. *arXiv Preprint*. https://doi.org/10.48550/arXiv.2212.09426

Zharova A, Boer A, Knoblauch J, Schewina KI and Vihs J (2022). Explainable Multi-Agent Recommendation System for Energy-Efficient Decision Support in Smart Homes. *arXiv Preprint*. Code in <u>GitHub</u>. https://doi.org/10.48550/arXiv.2210.11218 [presented at **NeurIPS 2022** Tackling Climate Change with Machine Learning Workshop]

Riabchuk V, Hagel L, Germaine F, and Zharova A (2022). Utility-Based Context-Aware Multi-Agent Recommendation System for Energy Efficiency in Residential Buildings. *arXiv Preprint*. Code in <u>GitHub</u>. https://doi.org/10.48550/arXiv.2205.02704

Zharova A, Mihoci A and Härdle WK (2016). Academic ranking scales in economics: prediction and imputation, *SFB* 649 Discussion paper, (020)2016. Quantilets in <u>GitHub</u>

Books

Chaikovskaya M and Zharova A (2013) Modelling of enterprises' activity, Odessa, Ukraine. ISBN 978-617-689-058-4. [In Ukrainian]

Selected Conference Proceedings or Equivalent Publications

Zharova A (2012) The practical methods of integration of system dynamics and agent-based modeling, In Proceedings of the XXXV international research and practice conference "Solution of a social requirements and objective reality issues in economical and juridical sciences" and the Third stage of research analytics championship, Ukraine. 2012. P.37-38. 1st Place Award