

Curriculum Vitae

Name: **Dr. Alona Zharova**
 Address: Humboldt-Universität zu Berlin (HU), School of Business and Economics,
 Chair of Information Systems, Unter den Linden 6, 10099 Berlin
 E-Mail: alona.zharova@hu-berlin.de
 Family Status: Married, 2 children
 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, HU
 Career breaks: 10/2018 – 02/2020 maternity leave, 1st child; 03/2020 – 02/2021 child caregiving due to COVID period; 08/2021 – 12/2022 maternity leave, 2nd child.

06/2014 – 03/2018 **Research Associate** (wissenschaftliche Mitarbeiterin), Ladislaus von Bortkiewicz Chair of Statistics, School of Business and Economics, HU

01/2017 – 03/2018 **Managing Director**, International Research Training Group 1792 "High Dimensional Nonstationary Time Series", HU
 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", HU
 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 forecast-based financial management – Increase from 83% to 99% in the efficiency of the allocated third-party funds

10/2011 – 09/2013 **Research Associate** (wissenschaftliche Mitarbeiterin), Chair of Management and mathematical modelling of business processes, School of Economics and Business Administration, Odessa I.I. Mechnikov National University, Ukraine
 Research in "Agent-based modelling in IT project management"

Academic Education

06/2014 – 03/2018 **Ph.D.** in Statistics and Econometrics, HU
 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
 Thesis: *Measuring the efficiency of marketing management using quantitative models*
 Grade: "with distinction", GPA 5.00 (of 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 (of 5.00) = German 1.15

06/2006 **Abitur**, focus in mathematics and economics, Reni Gymnasium, Ukraine
 Grade: "with distinction", GPA 11.85 (of 12.00) = German 1.06

International Research Stays

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| 10/2023 | Australian National University (ANU) , College of Arts and Social Science, Australia |
| 09/2023 | Universidad de La Habana (UH) , Cuba |
| 02/2018 – 03/2018 | National University Singapore (NUS) , Department of Statistics & Applied Probability, Faculty of Science, Singapore |

Awards and Grants

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| 2025 | Individual Global Partnership Grant for co-funding of a Research stay at the Australian National University (ANU), "Recommendation Systems for nudging households in Germany and Australia towards energy-efficient behavior to reduce CO2 emissions", by the DFG through the Strategic Partnerships Program of the Excellence of the HU (2500 €) |
| 2023 | Add-on Fellow of the Joachim Herz Stiftung in Interdisciplinary Economics and Interdisciplinary Business Administration, 2023 – 2026 (15500 €) |
| 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", funded by the DFG through the Strategic Partnerships Program of the Excellence of the HU (6000 €) |
| 2023 | Individual Grant for a Research stay at the Universidad de La Habana, Kuba (UH), "Sustainable Economic Development and Recommendations Systems supporting Energy-Efficiency in Private Households", funded by the DAAD through the Berlin Center for Global Engagement (BCGE) (4400 €) |
| 2013 | Individual Grant of Erasmus Mundus BMU-MID for 6 months Research stay at the Humboldt-Universität zu Berlin (9000 €) |
| 2012 | 1st Place Award at 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. |
| 2011 | 1st Place Award at the XII. Conference "Modern management: models, strategies, technologies" of ORIPA NAPA under the President of Ukraine, Odessa (UA): <i>Evaluation of efficiency of marketing management using forecasting models.</i> |
| 2010 | 1st Place Award at XI. Conference "Modern management: models, strategies, technologies" of ORIPA NAPA under the President of Ukraine, Odessa (UA): <i>Strategic human resources management as a key success factor for travel companies.</i> |
| 2006 | Gold Medal for the best Abitur performance |

Third-party Funds Projects

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| ongoing | Application for an International Research Training Group (IRTG) "AI Optimization and Forecasting in the Digital Era – Theory, Methods, and Algorithms" to the German Research Foundation (DFG) (state – submitted; my role – Co-PI) |
| 2024 – 2025 | Transfer project "Plattform zur Förderung von Energieeffizienz und CO2-Reduktion in Privathaushalten" funded by the Joachim Herz Stiftung (80000€ in total; my role - Sole Applicant) |
| 2023 – 2026 | Scientific Network "Management AI: AI algorithms for decision-making in businesses and organizations" together with Stefan Feuerriegel (LMU) and the colleagues funded by the DFG (36900 € in total; my role – Participating Researcher) |

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| 2023 – 2026 | Research project “AI for Energy Finance” funded by the European Union through the Romania's National Recovery and Resilience Plan (ca. 1.4 Mio. € in total; my role – Co-PI) |
| 2021 – 2023 | Research project “AI Marketer” funded by the Investitionsbank Berlin (IBB), funded by the Program for promoting Research, Innovations and Technologies (ProFIT), (296530 € in total; my role – Co-PI) |
| 2018 – 2020 | Joint research project HU-NUS in “Augmented Intelligence in Digital Society”, funded by the National University Singapore (NUS) (16500 € in total; my role – Co-PI) |

Further Third-party Funds Experience

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| 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”) |

Teaching Experience

Bachelors

Strategie, Organisation und Informationstechnologie, **Lecture & Exercise** (ca. 300 students / 200 exams), 2023

Grundlagen der Programmierung in Java, **Lecture & Exercise** (ca. 200 students / 150 exams), 2018, 2020, 2023, 2024

Seminar Wirtschaftsinformatik (24 students), 2018, 2020, 2024

Statistics II, **Exercise** (20 students), 2014

Introduction to Tackling Climate Change with Machine Learning, **Lecture** (10 students), International Summer School in Economics and Management (ISSEM) of the HU in Havana (Cuba), 2023

Management Simulation, **Simulation Game** (35 students), International Summer School in Economics and Management (ISSEM) of the HU in Havana (Cuba), 2015-2017, 2019

Masters

Business Analytics and Data Science, **Exercise** (ca. 150 students/ 90 exams), HU, 2020

Seminar IT Security and Privacy (40 students), HU, 2023 (together with other colleagues)

Seminar Information Systems, Implementation project (24 students), HU, 2020, 2022, 2023, 2024 (together with other colleagues)

Seminar Applied Predictive Analytics (24 students), HU, 2021 (together with other colleagues)

Ph.D.

Research **Seminar** Information Systems, HU, 2018, 2020, 2022, 2023, 2024 (together with Prof. Stefan Lessmann)

Professional & Community Activities

Refereeing activities

- Business & Information Systems Engineering (BISE) Journal, Reviewer
- Journal of Business Analytics, Reviewer
- Internationale Tagung Wirtschaftsinformatik 2024, Associate Editor and Reviewer

- European Conference on Information Systems (ECIS), 2024, Reviewer
- Tackling Climate Change with Machine Learning Workshop within ICLR (International Conference on Learning Representations), 2024 & 2023, Reviewer
- Tackling Climate Change with Machine Learning Workshop within NeurIPS (Neural Information Processing Systems) within, 2023, Program Committee and Meta-Reviewer
- International Journal of Forecasting, Reviewer

Committee work at HU

- Member of the Joint Commission for the **Master program** in Information Systems at the HU, since 2020
- Representative of the group of research associates at the **Faculty Council** (Fakultätsrat) of the School of Business and Economics, HU, 2018 – 2020
- Member of **Search committees** (Berufungskommissionen): three junior professorships (W1) and two full professorships (W3) at the HU, 2017 - 2024
- Scientific Member of about 10 **PhD committees**, since 2018

Further engagements

- **Expert** in the **Deutsche Klima-Konsortium e.V.** (DKK), since 2020
- Awarded an outstanding early-career researcher support under the **ProFiL** Program (Professionalisierung für Frauen in Forschung und Lehre: Mentoring – Training – Networking), Berlin University Alliance, 2023 - 2025
- **Volunteer** support for Ukrainian refugee researchers in Berlin, since 2022
- **Advisor** to StartUps, since 2021
- **Expert Advisor** of Vice President for Research and Research Service Centre of the HU, 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, financed by the DAAD, since 2015
- Supervisor of about 12 bachelor and 25 master **theses**, since 2020
- **Career counseling** for **female** students (BSc, MSc, and Ph.D.), since 2018

Short course organization

- Short course by **Jeffrey M. Wooldridge** (Michigan State University), 25–26/02/2019, Estimation of Treatment Effects
- Short course by **Matthew Harding** (University of California, Irvine), 01–04/06/2018, Applying Deep Learning and Machine Learning in Economics
- Short course by **Dirk Tunger** (Research Center Jülich), 26/04/2017, Bibliometric Analyses

Invited talks

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| 23.05.2024 | Mercator Research Institute on Global Commons and Climate Change , MCC Research Seminar / Climate Change & AI Berlin Brandenburg Workshop: <i>Recommendation Systems for Energy Efficiency in Residential Buildings</i> |
| 27.10.2023 | Australian National University , Crawford School Research Seminar, Canberra (AU): <i>Activity-based Recommendations for the Reduction of CO2 Emissions in Private Households</i> |
| 18.10.2023 | Australian National University , CSRM Seminar, Canberra (AU): <i>Activity-based Recommendations for the Reduction of CO2 Emissions in Private Households</i> |
| 23.09.2023 | Universidad de La Habana , Havana (CU): Sustainable Economic Development and Recommendation Systems supporting Energy Efficiency in Private Households |
| 13.02.2020 | Universidad de La Habana , Photovoltaic Lab, Havana (CU): <i>Smart Home Technology and Smart Energy</i> |

- 04.09.2018 **Deutsches Zentrum für Hochschul- und Wissenschaftsforschung, DZHW (DE):** *Is Scientific Performance a Function of Funds?*
- 08.05.2018 Brown Bag Seminar of the "Friedrich List" Faculty of Transport and Traffic Sciences, **TU Dresden (DE):** *Is Scientific Performance a Function of Funds?*
- 28.02.2018 **National University of Singapore**, Department of Statistics and Applied Probability, Singapore (SG): *Measures of University Research Output and Resource Usage Efficiency*
- 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): *Evaluating research performance of the collaborative research center*
- 13.03.2017 **National Taiwan University**, Taipei (TW): *Academic ranking scales in economics: prediction and imputation*

Publications

Peer-reviewed publications in journals

- Zharova* A, Boer A, Knoblauch J, Schewina KI and Vihs J (2024). Explainable Multi-Agent Recommendation System for Energy-Efficient Decision Support in Smart Homes. *Environmental Data Science*. 2024(3:e7). Code in [GitHub](#) <https://doi.org/10.1017/eds.2024.8>
- Riabchuk V, Hagel L, Germaine F and Zharova* A (2024) Utility-Based Context-Aware Multi-Agent Recommendation System for Energy Efficiency in Residential Buildings. *Information Fusion*, 112, 102559. Code in [GitHub](#). <https://doi.org/10.1016/j.inffus.2024.102559>
- 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*, 308(1), 353-368. <https://doi.org/10.1016/j.ejor.2022.10.016> Code in [GitHub](#)
- 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> Code in [GitHub](#)

Peer-reviewed publications in conferences

- Zharova* A, Löschmann L, and Lessmann S (2024) Activity-Based Recommendations for Demand Response in Smart Sustainable Buildings. 19. *Internationale Tagung Wirtschaftsinformatik*, Julius-Maximilians-Universität of Würzburg (forthcoming). Code in [GitHub](#).
- Aisbett* E, Steinhäuser R, and Zharova A (2024) Sustainable Development Goals: Midway Assessment and the Road Ahead: International Green Economy Collaboration Networks: pathway or peril for SDG 13? (Forthcoming in the *Asian Development Bank Institute Working Paper Series*, ADBI WP)
- Zharova* A, Löschmann L, and Lessmann S (2023) Activity-Based Recommendations for Demand Response in Smart Sustainable Buildings. Research-In-Progress presented at the *ICLR 2023 Tackling Climate Change with Machine Learning Workshop* ([Link](#))
- 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 ([Link](#)) Research-In-Progress presented at the *NeurIPS 2022 Tackling Climate Change with Machine Learning Workshop*.

Further conferences and workshops

- Zharova* A, Härdle WK, Lessmann S (2019) Is Scientific Performance a Function of Funds? *National University Singapore (NUS) Workshop on Research Metrics*, Singapore
- Zharova* A, Schirmer M (2019) Emergence of Trends in Economics, *Singapore Economic Review Conference 2019* (SERC), Singapore

Zharova* A, Härdle WK, Lessmann S (2017) A multivariate dynamic analysis of third-party funds. *International Conference on Econometrics and Statistics* (EcoSta 2017), Hong Kong

Chaikovska* M, Zharova A (2013) Methodological challenges of agent-dynamic modeling for IT project management, *Research journal of ONEU "Economics, political science, history"*, Odessa, 23 (202), P.12-19. [In Russian]

Zharova A (2013) Agent-dynamic approach for the enterprise management, In *Proceedings of the IV international scientific conference information technology and modelling in economics*, Cherkassy. P.76-77. [In Russian]

Working papers

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). <https://doi.org/10.48550/arXiv.2212.05019>

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

Zharova* A, Mihoci A and Härdle WK (2016). Academic ranking scales in economics: prediction and imputation, *SFB 649 Discussion paper*, (020)2016. Code in [GitHub](https://github.com)

Books

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

* - corresponding author



Berlin, 22. August 2024