JETLIR DURAJ

Email: firstnamelastname@gmail.com

EMPLOYMENT EXPERIENCE

Visiting Assistant Professor in Economics, University of Pittsburgh *Sep 2020-*

Senior Research Consultant for Data Science, OpenMind Technologies *Sep 2021-Mar 2022*
(deployed at Twitter – pre-Musk era)

Research Assistant, Rutgers School of Arts and Sciences - Mathematics *Summer 2020*

Research and Teaching Assistant at the Department of Economics, Harvard U. *2015-19*

Research Assistant at the Department of Mathematics, LMU Munich *2013-14*

EDUCATION

Ph.D. Mathematics, LMU Munich, Germany *Oct 2020*

Ph.D. Economics, Harvard U., Cambridge, MA, USA *May 2020*

M.Sc. Economics, LMU Munich, Germany *Jul 2013*

M.Sc. Mathematics, LMU Munich, Germany *Jul 2012*

B.Sc. Mathematics, LMU Munich, Germany *Jul 2011*

B.A. Economics, LMU Munich, Germany *Jul 2009*

RESEARCH INTERESTS

Quantitative Finance, Machine Learning, Probability Theory, Economic Theory (in the past)

PUBLICATIONS

Invariance Principles for Integrated Random Walks Conditioned to Stay Positive, with Michael Bär and Vitali Wachtel, Annals of Applied Probability, Vol. 33, No. 1 (2023) pp: 127-160

Martin Boundary for Random Walks in Cones, with Kilian Raschel, Pierre Tarrago and Vitali Wachtel, Annales Henri Lebesgue 5, 559-609, March 2022

Identification and Welfare Evaluation in Sequential Sampling Models, with Yi-Hsuan Lin, Theory and Decision 92, 407–431, 2022

Costly Information and Random Choice, with Yi-Hsuan Lin, Economic Theory, 2021

On Expected Utility in Optimal Stopping of Diffusions, Operations Research Letters 48(6), 811-815, November 2020

Invariance Principles for Random Walks in Cones, with Vitali Wachtel, Stochastic Processes and their Applications 130(7), 3920-3942, July 2020

On Harmonic Functions of Killed Random Walks in Convex Cones, Electronic Communications in Probability 19, paper no. 80, 1-10, 2014

Random Walks in Cones: The Case of Non-zero Drift, Stochastic Processes and their Applications 124(4), 1503-1518, April 2014

WORKING PAPERS IN QUANTITATIVE FINANCE

Deep Learning for Corporate Bonds, work in progress with Oliver Giesecke

Black-Litterman-End-To-End, work in progress with Zihao Li and Chenyu Yu

FX trading with signals in multiple horizons, work in progress with Jungjun Park and Zihao Li

WORKING PAPERS IN MATHEMATICS AND FINANCIAL MATHEMATICS

A multi-agent targeted trading equilibrium with transaction costs, with Jin Hyuk Choi and Kim Weston

Green Function of a Random Walk in a Cone, with Vitali Wachtel

OTHER WORKING PAPERS (MOSTLY ECONOMIC THEORY, OPERATIONS RESEARCH)

Clustering for Types, Learning the Utility

Bargaining with Endogenous Learning

Dynamic Information Design with Diminishing Sensitivity over News, with Kevin He

Dynamic Random Subjective Expected Utility

Mechanism Design with News Utility

Optimal Stopping with General Risk Preferences

SKILLS

Programming: C++, Python, Java, SQL, MATLAB

Languages: English (proficient), German (proficient), Albanian (native), Italian (basic)

HONORS AND AWARDS

Douglas Dillon Fellowship, Harvard University *2014-15*

VAC Alumni Prize for the 2nd best M.Sc. performance in Economics, LMU Munich *2011*

Scholarship of Ludwig-Maximilians-University Munich for foreign students *2008-12*

Scholarship of the Max Weber Program of the Elite Network of Bavaria, Germany *2008-11*

VAC Alumni Prize for the best B.Sc. performance in Economics, LMU Munich *2009*

PRESENTATIONS IN CONFERENCES

Joint Mathematics Meetings of the American Mathematical Society *Jan 2021*

Risk, Uncertainty and Decision conference, Paris School of Economics *Jun 2019*

NASMES, University of Washington *Jun 2019*

Stochastic Processes under Constraints, University of Augsburg *Jul 2016*

OTHER

Citizenship: Albanian Citizen, U.S. permanent resident

Hobbies: Swimming, focus on long-distance freestyle