www.linkedin.com/in/yelena-tuzova
(LinkedIn)

Top Skills

Econometrics
Economics
Stata

Certifications

Data Science

Honors-Awards

The Best Faculty Paper Award

BLAIS Research Grant ($24,876)

Distinguished Instructor Award

The Golden Key International Honor
Society Award

Graduated with High Distinction,
Department of Economics

Yelena Tuzova, Ph.D.

Data Scientist
Irvine, California

Summary

An experienced Ph.D. economist with in-depth training in
mathematics and quantitative modeling. Extensive knowledge
of dynamic general equilibrium models. Experience deploying
statistical (Logistic Regression, Time Series) and machine learning
(Decision Trees, Naive Bayes, Random Forest, Sentiment Analysis)
algorithms. Strong knowledge in writing programs in SAS, R,
SQL, and Python. Ability to analyze large and complex data sets.
Attentive to detail. Excellent writing and verbal communication skills.
Professional skills in producing clear, concise, and logical reports
and presentations. Previous experience presenting and lecturing
to large groups. Strong organization skills. Ability to work both
autonomously and in a close team setting.

• Ph.D. in Economics
• Machine Learning & Time-Series Econometrics
• SAS, R, Python, SQL, MATLAB, RATS, STATA, SPSS, TIBCO
Spotfire, Tableau, KNIME, RapidMiner
•   Dynamic General Equilibrium Modeling
• Credit Risk & Fraud
Modeling
• Forecasting & Predictive Analytics
• Visualization using TIBCO Spotfire, Tableau

Experience

CIT Bank
Quantitative Analyst, AVP
May 2019 - Present (11 months)
Pasadena, CA

• Developed quantitative models (e.g., customer attrition model, NIB DDA
account decay model) using R, Python, and SAS.
• Analyzed and cleaned big data sets using data mining tools.
• Delivered data assessments and model documentation reports.

Moody's Analytics
Associate Director
September 2018 - May 2019 (9 months)
San Francisco Bay Area

• Developed and applied quantitative models (e.g., a C&I lifetime loss rate model, PD, LGD, CMM, and Risk Frontier) using R, Python, and SQL for several customers.
• Provided technical support to build a proxy sample generation tool.
• Analyzed and cleaned big data sets using data mining tools.
• Delivered data assessments and model documentation reports.
• Mentored and supervised junior analysts.

Mechanics Bank
Senior Risk Analyst
October 2017 - September 2018 (1 year)
Irvine, CA

• Built quantitative models (e.g., call optimization model and behavioral scorecard model) using various ML algorithms with R, SAS, and SQL.
• Developed, recommended and implemented procedural changes to increase the effectiveness and accuracy of production.
• Assisted with all audit responses, including federal, state and internal reviews.
• Provided feedback to management regarding trends or deficiencies discovered during routine assessment reviews.
• Delivered routine scheduled reports, assessments and special audits.

Claremont Graduate University
Assistant Professor of Economics
July 2011 - August 2017 (6 years 2 months)
Claremont, CA

• Taught Ph.D. level courses in Mathematics for Economists, Probability and Statistics, Linear Algebra, International Trade, Dynamic General Equilibrium Modelling, Time Series Econometrics, Econometrics, Introduction to Modelling in SAS and R.
• Developed all instructional materials for Ph.D. level classes (lectures, power point slides, handouts, assignments, exams).
• Supervised and mentored Ph.D. students to help them successfully complete the graduate program.
• Served as Macro chair and worked with graduate students to select the courses they needed based on their interests, skills, and career goals.

• Submitted and graded Macro qualifying exams.
• Wrote scientific papers and presented at local and international conferences.
• Modified the curriculum and admission rules to bring in more qualified students.
• Collaborated with admissions on assigning financial aid to help talented and hardworking students successfully finish the program.

VNU Retail Group
SAS Credit/Data Modeler
February 2017 - July 2017 (6 months)
Irvine, CA

• Built quantitative models to determine fraud occurrence and financial risks to VNU Retail Group.
• Analyzed, examined and cleaned large datasets.
• Wrote codes in SAS and Python.

MUFG in the Americas
Economic Stress Testing Manager - Risk Capital Management, Vice President
August 2015 - January 2017 (1 year 6 months)
Irvine, CA

• Developed a stress test scenario ranking index (SRI) to compare the severity level of CCAR and DFAST macroeconomic scenarios and assess BHCs capital adequacy.
• Worked on various wholesale credit risk models (PD, LGD, REITS, CRE Perm, CRE Construction, HQA, economic capital model) to determine idiosyncratic risks to the Bank.
• Monitored current regional events to identify emerging economic trends and issues.
• Analyzed, examined and cleaned large datasets to build a PD model.
• Wrote codes in RATS, SAS, MATLAB, and R to perform simulation experiments and data analysis.
• Prepared model documentation and presentation materials for risk management and model validation teams.

ACERTAS
Senior Macro Economist
January 2014 - December 2014 (1 year)
Claremont, CA

• Built a dynamic general equilibrium (DGE) model to analyze the impact of foreign aid on the Afghanistan economy.

• Collected macroeconomic data on the Afghanistan economy to build an input-output matrix for the DGE model.
• Developed codes to perform calibration and simulation experiments using MATLAB to assess the effect of reduction of foreign aid on social and economic welfare.
• Synthesized a wide variety of academic research and transformed academic theory into practical, real-world based models.
• Produced written reports, charts and tables for presentations.

Claremont McKenna College, Lowe Institute of Political Economy
Researcher
January 2012 - January 2014 (2 years 1 month)
Claremont, CA

• Provided comprehensive analysis of the housing market in Southern California for local businesses and governmental agencies.
• Built forecasting models, using ARIMA, VAR and other econometric models to predict key housing data (i.e., home sales, median home prices, foreclosures, etc.).
• Collected data and interpreted market trends.
• Authored a variety of forecasting reports published in local newspapers and magazines.

Wesleyan College
Visiting Assistant Professor of Economics
August 2010 - August 2011 (1 year 1 month)
Macon, Georgia Area

• Taught undergraduate level courses in Macroeconomics, Microeconomics, History of Economic Thought, Women and Economic Development, International Trade, Money and Banking, and Managerial Economics (MBA course).
• Supervised and mentored students.
• Sat on scholarship and grants committees.

Renault
Cost Analyst
August 2009 - August 2010 (1 year 1 month)
Moscow, Russian Federation

• Provided technical and economic expertise to the Purchasing and Engineering departments used to nominate the final supplier.

• Evaluated the economic performance of the suppliers using tools, i.e. "commodity studies."
• Analyzed and adjusted sales costs for current mass-production phase vehicles, components and preliminary vehicle projects.
• Offered economic advice during the supplier selection process.

University of Minnesota
Instructor
September 2002 - July 2009 (6 years 11 months)

• Taught undergraduate level courses in the Russian Economy, Principles of Microeconomics, Principles of Macroeconomics, Intermediate Macroeconomics, Intermediate Microeconomics, International Trade.
• Graded problem sets and exams.

———

Education

University of Minnesota
Ph.D., Economics · (2002 - 2009)

University of Minnesota
M.A., Economics · (2002 - 2007)

Lomonosov Moscow State University (MSU)
B.A., Linguistics · (1997 - 2002)

University of Colorado Denver
B.A., Economics (major) /Mathematics (minor) · (1997 - 2001)

Ippolitov-Ivanov Academy of Music
B.A., Pianoforte · (1993 - 1997)