# Jackson P. Lautier

## **CONTACT INFORMATION**

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#### **EMPLOYMENT**

2023– Assistant Professor, Department of Mathematical Sciences, Bentley University, Waltham, MA, USA

#### **EDUCATION**

# **Degrees**

Ph.D. / 2023 Statistics, University of Connecticut, Storrs, CT, USA

Advisors: Vladimir Pozdnyakov, Jun Yan, Sy Han (Steven) Chiou (Assoc.), and Emiliano Valdez (Assoc.) Dissertation: Essays on Survival Analysis with Applications to Securitization and Consumer Finance Recognition: 2024 Arnold Zellner Thesis Award in Econometrics and Statistics, Honorable Mention

B.A. / 2011 Mathematics/Actuarial Science, University of Connecticut, Storrs, CT, USA

magna cum laude

## PROFESSIONAL DESIGNATIONS

## **Actuarial Credentials**

F.S.A. / 2015 Fellow of the Society of Actuaries

*Specialization: Quantitative Finance and Investment* 

C.E.R.A. / 2014 Chartered Enterprise Risk Analyst

M.A.A. / 2013 Member of the American Academy of Actuaries

## PROFESSIONAL WORK EXPERIENCE

## **United States Food and Drug Administration**

Oak Ridge Institute for Science and Education (ORISE) Fellow, Center for Drug Evaluation and Research (CDER)
Research topic: Machine learning applications in biopharmaceutical research (2021 – 2022, 2023, 2024)

## Prudential Financial, Inc.

- o Director, Actuary: Modeling, Variable and Fixed Annuities, supervisor of two direct reports (2018 2019)
- Quantitative Credit Research Analyst: Structured Products, PGIM Fixed Income (2016 2018)
- o Associate Actuary: Capital & Risk Management, Individual Life Insurance (2014 2016)
- o Senior Actuarial Associate: Guaranteed Minimum Withdrawal Benefit Pricing, Prudential Retirement (2013 2014)
- Senior Actuarial Associate: Pension Consulting Services, Retirement Planning Strategies (2011 2013)
- o Actuarial Intern: Pension Consulting Services (2010 2011)

#### RECOGNITION

## **Awards**

- Arnold Zellner Thesis Award in Econometrics and Statistics, Honorable Mention, Business and Economic Statistics Section, American Statistical Association (2024)
- Student Poster Award, Excellence in Statistical Science, UConn Department of Statistics 60th Anniversary Celebratory Conference, Consumer Credit Risk Convergence: The Case for Performance-Based Interest Rate Reductions in Consumer Automobile Loans (2022)
- Best Performance in Probability, Department of Statistics, University of Connecticut (2022)
- Student Paper Award, American Statistical Association (ASA), Risk Analysis Section, Modeling Time-to-Event Contingent Cash Flows: A Discrete-Time Survival Analysis Approach [\$600] (2022)
- o Conference Participation Award, University of Connecticut [\$1,000] (2021)

# **Fellowships**

- ORISE Oak Ridge Institute for Science and Education Fellowship, U.S. Food and Drug Administration (FDA), Center for Drug Evaluation and Research (CDER) [\$24,000] (2024)
- o Doctoral Dissertation Fellowship, University of Connecticut, The Graduate School [\$2,000] (2023)
- ORISE Oak Ridge Institute for Science and Education Fellowship, U.S. Food and Drug Administration (FDA), Center for Drug Evaluation and Research (CDER) [\$20,000] (2023)
- ORISE Oak Ridge Institute for Science and Education Fellowship, U.S. Food and Drug Administration (FDA), Center for Drug Evaluation and Research (CDER) [\$35,600] (2021 – 2022)
- NSF-GRFP National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP) Award Recipient, Mathematical Science (Statistics) [\$138,000] (2020 – 2023)
- o Statistics Fellowship, University of Connecticut, Department of Statistics [\$11,900] (2019 2020)

#### **Grants**

- Hoffman Center for Business Ethics, Bentley University [\$2,000] (2025)
- Seed Funding, Center for Health and Business, Bentley University [\$1,000] (2024)
- Faculty Seed for Success, Academic Innovation Initiative, Bentley University [\$14,000] (2024)
- Health Thought Leadership Network, Center for Health and Business, Bentley University [\$1,500] (2023)
- Hoffman Center for Business Ethics, Bentley University [\$2,000] (2023)

## **PUBLICATIONS**

## **Peer-Reviewed Publications**

- Lautier, J. P., Pozdnyakov, V., Yan, J. (2025). Estimating the time-to-event distribution for loan-level data within a consumer auto loan asset-backed security. *Annals of Applied Statistics*, 19 (4), 2831-2851. https://doi.org/10.1214/25-AOAS2103
- 2 Lautier, J. P. (2025). A new framework to estimate return on investment for player salaries in the National Basketball Association. Applied Stochastic Models in Business and Industry, 41: e70020. https://onlinelibrary.wiley.com/doi/10.1002/asmb.70020
- 3 **Lautier, J. P.**, Pozdnyakov, V., Yan, J. (2024). On the convergence of credit risk in current consumer automobile loans. *Journal of the Royal Statistical Society Series A: Statistics in Society*, qnae137 (Forthcoming). https://doi.org/10.1093/jrsssa/qnae137
- <sup>4</sup> **Lautier, J. P.**, Grosser, S., Kim, J., Kim, H., & Kim, J. (2024). Clustering plasma concentration-time curves: applications of unsupervised learning in pharmacogenomics. *Journal of Biopharmaceutical Statistics*, 35 (4), 678–696. https://doi.org/10.1080/10543406.2024.2365389

- 5 Lautier, J. P., Pozdnyakov, V., Yan, J. (2024). On the maximum likelihood estimation of a discrete, finite support distribution under left-truncation and competing risks. *Statistics & Probability Letters*, 207, 109973. https://doi.org/10.1016/j.spl.2023.109973
- <sup>6</sup> **Lautier, J. P.**, Pozdnyakov, V., Yan, J. (2023). Estimating a discrete distribution subject to random left-truncation with an application to structured finance. *Econometrics and Statistics*, Forthcoming. https://doi.org/10.1016/j.ecosta.2023.05.005
- 7 Lautier, J. P., Pozdnyakov, V., Yan, J. (2023). Pricing time-to-event contingent cash-flows: A discrete-time survival analysis approach. *Insurance: Mathematics and Economics*, 110, 53-71. https://doi.org/10.1016/j.insmatheco.2023.02.003 [2022 American Statistical Association Student Paper Award]
- 8 Cohen, J. P., Friedt, F. L., **Lautier, J. P.** (2022). The impact of the Coronavirus pandemic on New York City real estate: First evidence. *Journal of Regional Science*, 62 (3), 858–888. https://doi.org/10.1111/jors.12591 [Downloads & citations in top 10% of papers published in JRS for 2022-2023]

# **Working Papers**

- 1 **Lautier, J. P.,** Grosser, S., Kim, J., & Kim, J. (2024). pkDip: A new dissimilarity measure for clustering plasma concentration time curves. *Under Review*.
- 2 Injury risk in the National Basketball Association: An actuarial approach with Himchan Jeong and Hashan Peiris.
- 3 Testing for quasi-independence for discrete data under random left-truncation with Sy Han (Steven) Chiou.
- 4 Discrete time-to-event regression analysis under left-truncation with Vladimir Pozdnyakov and Jun Yan.

## **PRESENTATIONS**

# **Keynote Speaker**

1 Practical Applications of Data Science for Actuaries, Invited General Sessions, Actuaries' Club of Hartford & Springfield, Fall Meeting (2022)

## **Invited Talks**

- 1 Estimating the time-to-event distribution for loan-level data within a consumer auto loan asset-backed security, Invited Oral Presentations, 8th International Conference on Econometrics and Statistics, Waseda University, Tokyo, Japan
- 2 Estimating the time-to-event distribution for loan-level data within a consumer auto loan asset-backed security, Invited Oral Presentations, 2025 Joint Statistical Meetings, Nashville, TN (2025)
- 3 *A new framework to estimate return on investment for player salaries in the National Basketball Association,* Invited Oral Presentations, the 38th New England Statistics Symposium, Yale University (2025)
- 4 Estimating the time-to-event distribution for loan-level data within a consumer auto loan asset-backed security, Invited Oral Presentations, 2025 Lifetime Data Science Conference, Brooklyn, NY (2025)
- 5 Actuarial techniques in sports analytics: Contractual return on investment & injury analysis, Actuaries' Club of Hartford & Springfield Spring Meeting (2025)
- 6 *Injury risk in the National Basketball Association: An actuarial approach,* 2025 Connecticut Sports Analytics Symposium, Yale University (2025) [\*presented by co-author]
- 7 A new framework to estimate return on investment for player salaries in the National Basketball Association, Invited Poster Presentations, 19th Annual Sloan Sports Analytics Conference, Massachusetts Institute of Technology, Sloan School of Management (2025)
- 8 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Behavioral Economics in Insurance and Retirement Planning: Select Award for Research Submissions, Invited Oral Presentations, American Academy of Actuaries Webinar (2025)

- 9 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, Actuarial Science and Quantitative Risk Management Seminars, The Ohio State University (2024)
- 10 A new framework to estimate return on investment for player salaries in the National Basketball Association, Invited Oral Presentations, 2024 Cascadia Symposium on Statistics in Sports, Simon Fraser University (2024)
- 11 A new framework to estimate return on investment for player salaries in the National Basketball Association, Roundtable Discussions, Joint Statistical Meetings (2024)
- 12 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, 2024 Actuarial Research Conference, Middle Tennessee State University (2024)
- A discrete-time, semi-parametric time-to-event model for left-truncated and right-censored data, Invited Seminars, 27th Insurance: Mathematics and Economics International Congress, University of Illinois at Urbana-Champaign and DePaul University (2024)
- On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, 2024 North American Summer Meeting of the Econometric Society, Department of Economics, Vanderbilt University (2024)
- 15 A discrete-time, semi-parametric time-to-event model for left-truncated and right-censored data, Invited Seminars, New England Statistics Symposium, University of Connecticut (2024)
- 16 A new framework to estimate return on investment for player salaries in the National Basketball Association, Invited Seminars, UConn Sports Analytics Symposium, University of Connecticut (2024)
- 17 A new framework to estimate return on investment for player salaries in the National Basketball Association, Invited Seminars, Department of Statistics and Data Science, Southern Methodist University (2024)
- 18 A new framework to estimate return on investment for player salaries in the National Basketball Association, 2023 Midwest Sports Analytics Meeting, Central College (2023)
- 19 Essays on Survival Analysis with Applications to Securitization and Consumer Finance, Invited Seminars, UConn Actuarial Science Seminars, University of Connecticut (2023)
- 20 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, Fifth Biennial Auto Lending Conference, Federal Reserve Bank of Philadelphia (2023)
- 21 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Poster Presentations, 2023 Boulder Summer Conference on Consumer Financial Decision Making, University of Colorado Boulder Leeds School of Business (2023)
- 22 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, John Molson School of Business, Department of Finance, (Université) Concordia University (2023)
- 23 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, Department of Economics, University of Connecticut (2023)
- 24 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, Finance Department, School of Business, University of Connecticut (2023)
- 25 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Seminars, Department of Mathematical Sciences, Bentley University (2023)
- 26 Modeling Time-to-Event Contingent Cash Flows: A Discrete-Time Survival Analysis Approach, American Statistical Association, Risk Analysis Section, 2022 Student Paper Awards Invited Presentations, Joint Statistical Meetings (2022)
- 27 Applications of Survival Analysis in Financial Risk Management: Predicting and Pricing Asset-Backed Security Cash-Flows, Invited Seminars, SiDOR Research Group & CINBIO, Universida de Vigo (2022)
- 28 The Impact of the Coronavirus Pandemic on New York City Real-Estate: First Evidence, COVID and Cities paper session, American Real-Estate and Urban Economics Allied Social Sciences Associations Annual Meeting (2022)

# **Organized Paper Session Proposals**

- 1 The Assessment of Risk with Survival Analysis: New Methods and Applications, Invited Session Program, Joint Statistical Meetings (2026)
- 2 Recent results in survival analysis, Invited Session Program, 8th International Conference on Econometrics and Statistics (EcoSta 2025), Waseda University, Tokyo (2025)
- 3 Statistics in Actuarial Science and Risk Management, Invited Session Program, Joint Statistical Meetings (2025)
- 4 Incomplete Data & Survival Analysis, Invited Session Program, Lifetime Data Science Conference (2025)
- 5 Novelty within Clustering for Applications in the Biomedical Sciences, Topic Contributed Program, Joint Statistical Meetings (2024)
- 6 Running the gamut in survival analysis: Four recent results from four different subfields, Invited Session Proposals, New England Statistics Symposium, University of Connecticut (2024)

## **Contributed Conference Presentations**

- 1 pkDip: A New Dissimilarity Measure for Clustering Plasma Concentration Time Curves, Duke-Industry Statistics Symposium (2025)
- 2 *pkDip: A New Dissimilarity Measure for Clustering Plasma Concentration Time Curves*, Novelty within Clustering for Applications in the Biomedical Sciences, Topic Contributed Program, Joint Statistical Meetings (2024)
- 3 *pkDip: A New Dissimilarity Measure for Clustering Plasma Concentration Time Curves,* Clustered Data Methods, ENAR 2024 Spring Meeting (2024)
- 4 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Topics on Financial Econometrics and Macroeconomic Modeling, Joint Statistical Meetings (2023)
- 5 On the Convergence of Credit Risk in Current Consumer Automobile Loans, Invited Student Papers Session, New England Statistics Symposium (2023)
- 6 Applications of Machine Learning in Pharmacogenomics: Clustering Pharmacokinetic Concentration Curves, Dose Finding, Dose Selection, and Early-Phase Trials paper session, Joint Statistical Meetings (2022) [\*presented by co-author]
- 7 Modeling Financial Cash Flows with Discrete-time Survival Analysis, Invited Student Papers Session, New England Statistics Symposium (2022)
- 8 Estimating a Discrete Distribution from Data Subject to Random Left-Truncation, Invited Student Papers Session, New England Statistics Symposium (2021)

## STATISTICAL SOFTWARE

da Cunha Godoy, L., Lautier, J.P. (2025). *abslife: Asset-Backed Security for lifetime data*. R package version 0.0.95, http://lcgodoy.me/abslife/.

#### STUDENT SUPERVISION

## **Bentley University**

- 1 Julia Rubin, Undergraduate Student Research Assistantships, Faculty Mentor (2025)
- 2 Amanda Jacobsen, Undergraduate Student Research Assistantships, Faculty Mentor (2025)
- 3 Emerson Mallis, Undergraduate Student Research Assistantships, Faculty Mentor (2025)
- 4 Alex Manes, Undergraduate Student Research Assistantships, Faculty Mentor (2024)
- 5 Costas Dhimogjini, Undergraduate Student Research Assistantships, Faculty Mentor (2024)
- 6 Roan Maye, Valente Center Undergraduate Researcher Program, Faculty Mentor (2023 2024)

#### **Research Assistants**

- 1 Lucas da Cunha Godoy, Postdoctoral Fellow, University of California, Santa Cruz (2025 –)
- 2 Yi Wen (Evan) Huang, Undergraduate, University of Texas, Austin (2025 –)

#### TEACHING EXPERIENCE

# **Courses Taught**

- MA352 Mathematical Statistics, Bentley University (S2026)
- o MA214 Intermediate Applied Statistics, Bentley University (S2026)
- MA214 Intermediate Applied Statistics, Bentley University (F2025)
- o MA214 Intermediate Applied Statistics, Bentley University (S2025)
- MA214 Intermediate Applied Statistics, Bentley University (F2024)
- ST113 Business Statistics, Bentley University (F2025)
- ST113 Business Statistics, Bentley University (S2024)
- o ST113 Business Statistics, Bentley University (F2023)
- o Math 3639 Actuarial Loss Models, University of Connecticut (S2019)
- Math 3639 Actuarial Loss Models, University of Connecticut (F2018)

# **Teaching Assistant**

- Elementary Concepts of Statistics, University of Connecticut (2020)
- Elementary Concepts of Statistics, University of Connecticut (2019)

# **Instructional Workshops**

- Basketball Analytics with R Instructional Workshop, UConn Sports Analytics Symposium [git] (2021)
- Basketball Analytics with R Instructional Workshop, UConn Sports Analytics Symposium [git] (2020)

## **PROFESSIONAL ACTIVITIES**

## **Professional Service**

- Risk Analysis Section, American Statistical Association, Publications Officer Elect (2026–2027)
- New England Statistical Society NextGen: Data Science Day, Student Poster Judge (November 2025)
- New England Statistics Symposium, Student Poster Judge (2025)
- o Business & Economic Statistics Section, American Statistical Association, Social Media Liaison (2024–)
- o Business & Economic Statistics Section, American Statistical Association, Student Paper Award Committee (2024)

# **University Service**

o Committee Member for Salary and Benefits Committee, Bentley University (2025–)

# **Department Service**

- Research Committee, Department of Mathematical Sciences, Bentley University (2024–)
- o Tenure Track Search Committee, Department of Mathematical Sciences, Bentley University (2024)
- Social Committee, Department of Mathematical Sciences, Bentley University (2023–2025)

# **Speaking Engagements**

- o Careers in Data Science, Invited Panelist, New England Statistical Society NextGen: Data Science Day, Brandeis University (November 2025)
- Academic Career Panel Discussion, Invited Panelist, American Statistical Association, Risk Analysis Section, Webinar (2025)
- CAREERS IN ACADEMIA: A Panel Discussion by NESS NextGen, Invited Panelist, the 38th New England Statistics Symposium, Yale University (2025)

# **Conference Organization**

- 9th International Conference on Econometrics and Statistics (EcoSta 2026), Scientific Program Committee
- 2024 Mini-Symposium on Statistical Computing in Action, Sponsored by the Section on Statistical Computing of the American Statistical Association, Organizing Committee Member

# **Professional Memberships**

- Institute of Mathematical Statistics (2022–)
- American Statistical Association, Member (2019–) [Sections: Business and Economic Statistics (2019 –), Risk Analysis (2019 –), Statistics in Sports (2021–), Biopharmaceutical (2022–), Lifetime Data Science (2022–)]
- New England Statistical Society (2019–)
- o American Academy of Actuaries (2012–)
- Society of Actuaries (2009–)

# **Referee Reports**

- o American Journal of Undergraduate Research
- o Journal of Risk and Financial Management
- Risks
- Statistical Methods & Applications
- Statistics and Its Interface
- o The American Statistician

# **Conference Participation**

- o 8th International Conference on Econometrics and Statistics, Waseda University, Tokyo, Japan (2025)
- o Joint Statistical Meetings, American Statistical Association, Nashville, TN (2025)
- o Lifetime Data Science Conference, Brooklyn, NY (2025)
- Duke-Industry Statistics Symposium, Hilton Durham Near Duke University, Durham, NC (2025)
- 19th Annual MIT Sloan Sports Analytics Conference, Hynes Convention Center, Boston, MA (2025)
- o Cascadia Symposium on Statistics in Sports, Simon Fraser University, Vancouver, BC (2024)
- o Joint Statistical Meetings, American Statistical Association, Portland, OR (2024)
- Actuarial Research Conference, Middle Tennessee State University, Murfreesboro, TN (2024)
- 27th Insurance: Mathematics and Economics International Congress, Chicago, IL (2024)
- North American Summer Meeting of the Econometric Society, Department of Economics, Vanderbilt University (2024)
- o New England Statistical Symposium, New England Statistical Society, Storrs, CT (2024)
- UConn Sports Analytics Symposium, University of Connecticut, Storrs, CT (2024)
- Eastern North American Region Spring Meeting, Baltimore, MD (2024)
- Midwest Sports Analytics Meeting, Central College, Pella, IA (2023)
- New England Symposium on Statistics in Sports, Harvard University, Cambridge, MA (2023)

- o Joint Statistical Meetings, American Statistical Association, Toronto, ON (2023)
- o Fifth Biennial Auto Lending Conference, Federal Reserve Bank of Philadelphia, Philadelphia, PA (2023)
- o Consumer Financial Decision Making, University of Colorado Boulder Leeds School of Business, Boulder, CO (2023)
- Innovative Data in Household Finance, National Bureau of Economic Research, Cambridge, MA (2022)
- Excellence in Statistical Science, UConn Department of Statistics 60th Anniversary Celebration, Storrs, CT (2022)
- o Joint Statistical Meetings, American Statistical Association, Washington, DC (2022)
- New England Statistical Symposium, New England Statistical Society, Storrs, CT (2022)
- Allied Social Sciences Associations (ASSA) Annual Meeting, American Economic Association, Virtual (2022)
- o New England Statistical Symposium, New England Statistical Society, Providence, RI (2021)
- o Joint Statistical Meetings, American Statistical Association, Virtual (2021)
- o Annual Meeting & Exhibit, Society of Actuaries, Virtual (2020)
- Predictive Analytics Symposium, Society of Actuaries, Minneapolis, MN (2018)
- ABS East, Structured Finance, Information Management Network, Miami, FL (2017)
- o ABS West, Structured Finance, Information Management Network, Las Vegas, NV (2017)
- ABS East, Structured Finance, Information Management Network, Miami, FL (2016)
- o Annual Meeting & Exhibit, Society of Actuaries, Las Vegas, NV (2016)
- o Investment Symposium, Society of Actuaries, Philadelphia, PA (2015)

## **VOLUNTEER SERVICE**

- o Actuarial Bootcamp, Enterprise Risk Management Topic Presenter, University of Connecticut (2014 2023)
- o Exam ERM & FSA Specialty Exam Proctor, Society of Actuaries (2020)
- Breadline volunteer (weekly), St. Francis of Assisi, New York, NY (2016 2018)
- o Introduction to the Actuarial Profession and Statistical Black Swans, West Orange High School, NJ (2016)
- Adventure Saturday program for at-risk youth, St. Patrick, St. Anthony Church, Hartford, CT (2014 2015)