

Samuel J. Frame, Ph.D.

805.602.2560
<https://statistics.calpoly.edu/Samuel-Frame>

sframe@calpoly.edu

Education

Ph.D. Statistics and Applied Probability (2006)
University of California, Santa Barbara
Thesis: “Some Contributions to Semi-Supervised Learning”

M.A. Statistics (2004)
University of California, Santa Barbara

B.S. Statistics, Minor in Mathematics (2001)
California Polytechnic State University, San Luis Obispo
Senior Project: “M: Quantifying the Difference Between Maps”

Current Affiliation

California Polytechnic State University
San Luis Obispo, CA
Department of Statistics

March 2006-Present

2018-Present: Full Professor

- Service Roles: College of Science and Mathematics Peer Review Committee (chaired), Department Peer Review Committee (chaired), Noyce School of Applied Computing Advisory Board, General Education Governance Board, Statistics Minor Advisor, CSU Statewide Academic Senator, Cal Poly Academic Senator, tenure-track and lecturer search committees, three MPP search committees
- CSU Online Services Program: CSU QLT course reviewer, Q1 facilitator, SQuAIR Research Associate
- Course Development: GSB 518 (Essential Statistics for Business Analytics), QOTA funded development of online STAT 312 (Statistics for Engineers and Scientists)
- Research and Consulting: Student behaviors in online statistics courses, Wells Fargo Consumer Lending PPNR and CCAR Team, Visit SLO CAL county-level hotel occupancy analytics, online material development for McGraw Hill
- Teaching: Statistical computing, graduate courses in business, six introductory/intermediate statistics courses, supervised six senior projects

2013-2018: Associate Professor

- Service Roles: Data science minor curriculum committee, General Education Governance Board, Academic Affairs Budget Planning Committee (special appointment from the Provost), Budget and Long-Range Planning Committee, Statistics Minor Advisor, tenure-track and lecturer search committees, three MPP search committees, two other university-level budget committees
- Program Development: Cross-Disciplinary Data Science Minor, M.S. Business Analytics
- CSU Online Services Program: Q1 and Q2 certified online course reviewer
- Course Development: GSB 510 (Data Visualization and Communication), GSB 512 (Quantitative Analysis), QOTA funded development of online STAT 252 (Statistical Inference for Management)

- Research and Consulting: Wells Fargo Consumer Lending PPNR and CCAR Team, marketing analytics for Marketing Evolution, Mentor eData driver risk model development, online material development for McGraw Hill, financial management and econometric analysis
- Teaching: Time series, statistical computing, graduate courses in business, three introductory/intermediate statistics courses, supervised fourteen senior projects

2007-2013: Tenure-Track Assistant Professor

- Service Roles: Budget and Long-Range Planning (chaired), Cal Poly Academic Senator, General Education Task Force I and II, tenure-track and lecturer search committees, three other university-level budget committees
- Course Development: BUS 461/462 (Student Managed Portfolio Project)
- Research and Consulting: Financial management and econometric analysis, Mentor eData driver risk model development, bond pricing analysis for the California Earthquake Authority and California Department of Insurance
- Teaching: Mathematical statistics, time series, stochastic processes, statistical computing, six introductory/intermediate statistics courses, supervised nine senior projects

2006-2007: Lecturer

- Course Development: Converted the Statistical Computing with R course from STAT 430 (elective) to STAT 331 (required)
- Research and Consulting: Semi-supervised learning for target recognition and pedestrian tracking funded by the Office of Naval Research
- Teaching Summary: Statistical computing, five introductory/intermediate statistics courses

Previous Affiliations

Visit SLO CAL March 2018 - September 2018
 Research Associate San Luis Obispo, CA
 Research consultant for the San Luis Obispo County Marketing District. Use of hotel STR reports (occupancy, average daily rate and revenue per available room), Visa Vue spending reports, Arrivalist exposure and arrivals, and marketing allocations for generating forecasts and new market segment identification.

Wells Fargo Consumer Lending August 2016 - April 2018
 Advanced Analytics Consultant III Remote and Part-Time Managed Resource
 Research and development of loan-level loss forecasting and stress-testing models, CCAR and MCST, and ACL/BLF models; developed documentation of the Loan-Level Loss Forecasting Model (QTM 11297 v6.1), Auto Loans ACL Model (QTM 12455 v1.0), and Loan-Level Loss Forecasting Model (QTM 11297 v7.1).

Mentor eData/DriveInsight March 2013 - September 2017
 Research Associate San Luis Obispo, CA
 Use of Virginia Technical Transportation Institute driving behavior data to develop a model to monitor and predict driver crash risk.

University of California, Berkeley January 2016 - June 2016
 Lecturer, School of Information Remote
 Taught synchronous online sections of regression and time series analysis for the M.S. Data Science program.

Wells Fargo Dealer Services June 2014 - November 2014
 Advanced Analytics Consultant I Charlotte, NC

Research and development of loan-level loss forecasting models; developed documentation of the Indirect Loan-Level Loss Forecasting Model (QTM 11297 v3.1).

Toyon Research Corporation June 2001–August 2006
I.S.R. Algorithm Analyst Goleta, CA
Intelligence, Surveillance, and Reconnaissance Algorithm Team; contributed to the development of software for generalized linear mixed-effects models (R), semi-supervised learning methods, and automatic target recognition and tracking.

University of California, Santa Barbara June 2003–March 2006
Department of Statistics and Applied Probability
Research Assistant Goleta, CA
Center for Bio-Image Informatics funded by the National Science Foundation ITR-0331697: contributed to the development of software for biological image analysis, repository data mining, and online classification and analysis. Additional support from NASA’s California Space Grant Graduate Fellowship Fund.

University of California, Santa Barbara September 2001–March 2006
Department of Statistics and Applied Probability
Teaching Assistant Goleta, CA
Taught 14 graduate and undergraduate sections including introductory statistics, statistics with economics and business applications, introduction to nonparametric models, probability and statistics, SAS programming, and statistical theory.

Computing Languages

Basic, C, C++, Cobalt, EViews, Fortran, Java, JMP, LaTeX, MATLAB, Microsoft Office (Excel, Word, Powerpoint), Minitab, MongoDB, Pascal, PostgreSQL, R, RStudio, RMarkdown, S+, SPSS, SAS, SQL, Tableau

In Preparation

Sabbag, A. and Frame, S. (Working). “Collaboration in Online Learning for Introductory Statistics Courses.”

Frame, S. and Ramezani, R. (Working). “Using Asymmetric Double-Jump Processes to Forecast Volatility Movements.”

Publications

Sabbag, A. and Frame, S. (2022). “Patterns of interaction with videos and collaborative assignments in an asynchronous online statistics course.” Invited paper at the *Proceedings of the 11th International Conference on Teaching Statistics (ICOTS)*, July 2022, Rosario, Argentina.

Sabbag, A. and Frame, S. (2021). “Learning Design and Student Behavior in a Fully Online Statistics Course.” *Technology Innovations in Statistics Education*, 13(1).

Frame, S., and Ramezani, R. (2018). “The Impact of Predicted Earnings Surprises on Equity Returns.” *Journal of Accounting and Finance*, 18(7).

Frame, S., Berding, J., Martin, J. and Tu, R. (2018). “The Value of Publicly Available Predicted Earnings Surprises.” *Journal of Finance and Data Science*, 5(1).

Frame, S. and Ramezani, C. (2014). “Bayesian Estimation of the Asymmetric Double-Jump Processes.” *Annals of Financial Economics*, 9(3).

Seiver, D. and Frame, S. (2013). "Using Value Line's Median Appreciation Potential to Forecast Long-Horizon Market Returns." *Journal of Wealth Management*, 16(2).

Frame, S. and Burke, B. (2011). "Using Multiple Regression to Understand the Length of Divorce." *Journal of Divorce and Remarriage*, 52(06).

Frame, S. and Jammalamadaka, S. R. (2007). "Generalized Mixture Models, Semi-supervised Learning, and Unknown Class Inference." *Advances in Data Analysis and Classification (ADAC): Theory, Methods, and Applications in Data Science*, 1(1).

Beckman, D. and Frame, S. (2003). "Comparison of features from SAR and GMTI imagery of ground targets," *Proceedings of the SPIE Conference on Algorithms for Synthetic Aperture Radar Imagery X*.

Technical Reports

Wells Fargo Consumer Lending and PPNR Team (2017). "Loan-Level Loss Forecasting Model." QTM 11297 v7.1. Approved for use by Corporate Model Risk and the Federal Reserve.

Wells Fargo Dealer Services Loss Forecast Modeling and Analytics and CCAST Portfolio Team (2017). "Auto Loans ACL Model." QTM 11245 v1.0. Approved for use by Corporate Model Risk and the Federal Reserve.

Wells Fargo Dealer Services Loss Forecast Modeling (2016). "Loan-Level Loss Forecasting Model." QTM 11297 v6.1. Approved for use by Corporate Model Risk and the Federal Reserve.

Frame, S. (2015). "Comparing Time Series Analysis to Individual Level Data." Marketing Evolution.

Wells Fargo Dealer Services Loss Forecast Modeling (2015). "Indirect Loan-Level Loss Forecasting Model." QTM 11297 v3.1. Approved for use by Corporate Model Risk and the Federal Reserve.

Frame, S. (2010). "Feature Selection and Boosted Classification Algorithms for Pedestrian Detection: Final Report." California Central Coast Research Partnership and Office of Naval Research (N00014-07-1-1152).

Frame, S. and Ramezani, C. (2009). "Analysis of the financial structure, sustainability, and survivability of the California Earthquake Authority: Final Report." California Department of Insurance (CDI-70401A).

Frame, S. (2009). "Statistical Algorithms for Pedestrian Detection: Final Report." California Central Coast Research Partnership and Office of Naval Research (N00014-07-1-1152).

Frame, S. and Jammalamadaka, S. R. (2006). "Statistical Analysis of Biological Images with Generalized Mixture Models and Semi-supervised Learning." Department of Statistics and Applied Probability.

Frame, S., Juricek, B. and Bates, D. (2006). "Generalized Linear Mixed-Effects Models in R: Phase II Final Report." U.S. Army Medical Research and Materiel Command (DAMD17-02-C0119).

Frame, S., Miller, D., Brown, A. and Sullivan, K. (2005). "Machine Learning for Robust Automatic Target Recognition: Phase II Final Report." U.S. Air Force Research Laboratory (FA8650-04-M-1659).

Frame, S. and Sullivan, K. (2003). "Continuous Identification of Ground Vehicles: Phase II Final Report." U.S. Air Force Research Laboratory (F33615-01-C-1861).