Robert Alan Clements

Assistant Professor at University of San Francisco
San Francisco Bay Area, CA USA
rclements@usfca.edu
r-clements linkedin.com/in/rbclements/ | *Updated:* June 3, 2024

EDUCATION

University of California, Los Angeles, Ph.D. Statistics 2011

- Thesis Topic: *A Comparison of Residual Analysis Methods for Space-time Point Processes with Applications to Earthquake Forecast Models*
- Advisor: Professor Frederic Paik Schoenberg
- Area of Study: Point processes

University of California, Los Angeles, M.S. Statistics 2009
Humboldt State University, B.A. Mathematics 2006

- Cum Laude
- Emphasis: Applied Mathematics

FELLOWSHIPS

Eugene V. Cota-Robles Fellowship 2007–2011
Role: Graduate Fellow

EMPLOYMENT

University of San Francisco, San Francisco, CA

Assistant Professor, MS in Data Science	Aug 2022–Present
Director of the Center for AI and Data Ethics	Aug 2023–Present
Practicum Director	Aug 2022–Present

Optum, San Francisco Bay Area, CA

Senior Director of Data Science	Aug 2021–July 2022
Director of Data Science	Mar 2019–Jul 2021

University of California, Berkeley Extension, San Francisco office

Instructor	Jan 2018–Jan 2020

Walmart Labs, San Bruno, CA

Data Scientist - Data Science Manager	Aug 2018–Mar 2019

UnitedHealthcare, San Francisco Bay Area, CA

Senior Principal Data Scientist	Aug 2016–Aug 2018

GE Digital, San Ramon, CA

Staff Data Scientist	Mar 2016–Jul 2016

Senior Data Scientist — Dec 2014–Mar 2016

Verisk Analytics, San Francisco, CA

Senior Statistician — Sep 2013–Nov 2014

GFZ Potsdam, Potsdam, Germany

Postdoctoral Researcher — Sep 2011–Jun 2013

PATENTS

US Patent 20180307784, "Usage Based Lifing" Oct 2018
Inventors: Stevens, Craig Wesley (Revere, MA, US), Chan, Simon Shu Kong (Danville, CA, US), Wu, Siyu (San Ramon, CA, US), Vahldick, Lauren Ashley (Salem, MA, US), Wight, Ronald Burton (Lisbon Falls, ME, US), **Clements, Robert Alan (Pacifica, CA, US)**

PUBLICATIONS

Clements RA, Schoenberg FP, and Schorlemmer D. 2011. Residual analysis methods for space-time point processes with applications to earthquake forecast models in California. *Annals of Applied Statistics*. 5 (4): 2549-2571. doi:10.1214/11-AOAS487

Clements RA, Schoenberg FP, and Veen A. 2012. Evalution of space-time point process models using super-thinning. *Environmetrics*. 23: 606-616. doi:10.1002/env.2168

Holschneider M, Zöller G, **Clements RA**, and Schorlemmer D. 2014. Can we test for the maximum possible earthquake magnitude? *Journal of Geophysical Research: Solid Earth*. 119(3), 2019-2028. doi:10.1002/2013JB010319

Schneider M, **Clements RA**, Schorlemmer D, and Rhoades D. 2014. Likelihood- and Residual-Based Evaluation of Medium-Term Earthquake Forecast Models for California. *Geophysical Journal International*. 198 (3): 1307-1318. doi:10.1093/gji/ggu178

Mak S, **Clements RA**, and Schorlemmer D. 2014. The Statistical Power of Testing Probabilistic Seismic-Hazard Assessments. *Seismological Research Letters*. v. 85 no. 4 p. 781-783. doi:10.1785/0220140012

Mak S, **Clements RA**, and Schorlemmer D. 2014. Comment on "A New Procedure for Selecting and Ranking Ground-Motion Prediction Equations (GMPEs): The Euclidean Distance-Based Ranking (EDR) Method" by Ozkan Kale and Sinan Akkar. *Seismological Research Letters*. 104 (6): 3139. doi:10.1785/0120140106

Gordon SJ, **Clements RA**, Schoenberg FP, Schorlemmer D. 2015. Voronoi residuals and other residual analyses applied to CSEP earthquake forecasts. *Spatial Statistics*. 14B: 133-150. doi:10.1016/j.spasta.2015.06.001

Mak S, **Clements RA**, and Schorlemmer D. 2015. Validating Intensity Prediction Equations for Italy by Observations. *Bulletin of the Seismological Society of America*. 105(6): 2942-2954. doi:10.1785/0120150070

Mak S, **Clements RA**, and Schorlemmer D. 2017. Empirical Evaluation of Hierarchical Ground-Motion Models: Score Uncertainty and Model Weighting. *Bulletin of the Seismological Society of America*. 107(2): 949-965. doi:10.1785/0120160232