

Robert Alan Clements

Assistant Professor at University of San Francisco
San Francisco Bay Area, CA USA

✉ rclements@usfca.edu ☎ +1 925-577-9803

🌐 [r-clements](#) in [linkedin.com/in/rbclements/](https://www.linkedin.com/in/rbclements/) | Updated: February 7, 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 Lifting” 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](https://doi.org/10.1214/11-AOAS487)

Clements RA, Schoenberg FP, and Veen A. 2012. Evaluation of space-time point process models using super-thinning. *Environmetrics*. 23: 606-616. [doi:10.1002/env.2168](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/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](https://doi.org/10.1785/0120160232)