

NSF BIOGRAPHICAL SKETCH

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IDENTIFYING INFORMATION:

NAME: Kyprioti, Aikaterini (Katerina) P.

ORCID: 0000-0002-2346-1307

POSITION TITLE: Assistant Professor

ORGANIZATION AND LOCATION: University of Oklahoma, Norman, OK, US**Professional Preparation:**

ORGANIZATION AND LOCATION	DEGREE (if applicable)	DATE RECEIVED	FIELD OF STUDY
University of Notre Dame, Notre Dame, Indiana, US	PhD	07/2022	Civil Engineering
University of Notre Dame, Notre Dame, Indiana, US	MS	07/2022	Applied and Computational Mathematics and Statistics
Aristotle University of Thessaloniki, Thessaloniki, North Macedonia, GR	MS	09/2016	Earthquake Engineering
Aristotle University of Thessaloniki, Thessaloniki, North Macedonia, GR	BS	12/2014	Civil Engineering

Appointments and Positions

2022 - present Assistant Professor, University of Oklahoma, Civil Engineering & Environmental Sciences, Norman, OK, US

2017 - 2022 Research Assistant, University of Notre Dame, Civil and Environmental Engineering & Earth Sciences, Notre Dame, Indiana, US

Products**Products Most Closely Related to the Proposed Project**

1. Kyprioti A, Irwin C, Taflanidis A, Nadal-Caraballo N, Yawn M, Aucoin L. Spatio-temporal storm surge emulation using Gaussian Process techniques. Coastal Engineering. 2023 March; 180:104231-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0378383922001442>
DOI: 10.1016/j.coastaleng.2022.104231
2. Patsialis D, Kyprioti A, Taflanidis A. Bayesian calibration of hysteretic reduced order structural models for earthquake engineering applications. Engineering Structures. 2020 December; 224:111204-. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0141029620338050>
DOI: 10.1016/j.engstruct.2020.111204
3. Manos G, Katakalos K, Kotoulas L, Koidis G, Kyprioti K, Kourtidis V. The suspended roof of

the Stavros Niarchos Foundation Cultural Center (SNFCC) at Athens, Greece: Laboratory tests and numerical simulations. *Soil Dynamics and Earthquake Engineering*. 2019 April; 119:408-421. Available from: <https://linkinghub.elsevier.com/retrieve/pii/S0267726117309326> DOI: 10.1016/j.soildyn.2018.03.019

4. Kyprioti A, Taflanidis A, Kennedy A. Dissipation Effects of Coastal Vegetation on Nearshore Structures under Wave Runup Loading. *Journal of Structural Engineering*. 2021 March; 147(3):- . Available from: <https://ascelibrary.org/doi/10.1061/%28ASCE%29ST.1943-541X.0002902> DOI: 10.1061/(ASCE)ST.1943-541X.0002902
5. Kyprioti A, Taflanidis A. Addressing the different sources of excitation variability in seismic response distribution estimation using kriging metamodeling. *Earthquake Engineering & Structural Dynamics*. 2022 June 22; 51(10):2466-2495. Available from: <https://onlinelibrary.wiley.com/doi/10.1002/eqe.3696> DOI: 10.1002/eqe.3696

Other Significant Products, Whether or Not Related to the Proposed Project

1. Kyprioti A, Adeli E, Taflanidis A, Westerink J, Tolman H. Probabilistic Storm Surge Estimation for Landfalling Hurricanes: Advancements in Computational Efficiency Using Quasi-Monte Carlo Techniques. *Journal of Marine Science and Engineering*. 2021 November 23; 9(12):1322-. Available from: <https://www.mdpi.com/2077-1312/9/12/1322> DOI: 10.3390/jmse9121322
2. Kyprioti A, Taflanidis A. Kriging metamodeling for seismic response distribution estimation. *Earthquake Engineering & Structural Dynamics*. 2021 August 02; 50(13):3550-3576. Available from: <https://onlinelibrary.wiley.com/doi/10.1002/eqe.3522> DOI: 10.1002/eqe.3522
3. Kyprioti A, Taflanidis A, Plumlee M, Asher T, Spiller E, Luetlich R, Blanton B, Kijewski-Correa T, Kennedy A, Schmied L. Improvements in storm surge surrogate modeling for synthetic storm parameterization, node condition classification and implementation to small size databases. *Natural Hazards*. 2021 July 14; 109(2):1349-1386. Available from: <https://link.springer.com/10.1007/s11069-021-04881-9> DOI: 10.1007/s11069-021-04881-9
4. Kyprioti A, Taflanidis A, Nadal-Caraballo N, Campbell M. Incorporation of sea level rise in storm surge surrogate modeling. *Natural Hazards*. 2020 October 12; 105(1):531-563. Available from: <https://link.springer.com/10.1007/s11069-020-04322-z> DOI: 10.1007/s11069-020-04322-z
5. Kyprioti A, Zhang J, Taflanidis A. Adaptive design of experiments for global Kriging metamodeling through cross-validation information. *Structural and Multidisciplinary Optimization*. 2020 March 09; 62(3):1135-1157. Available from: <http://link.springer.com/10.1007/s00158-020-02543-1> DOI: 10.1007/s00158-020-02543-1

Synergistic Activities

1. Member of the Engineering Mechanics Institute (EMI) of American Society of Civil Engineers (ASCE) (2019-now) with participation in multiple committees (Educational, Objective Resilience, Probabilistic Methods, Machine Learning for Mechanics and Dynamic roasters). (2019-present)
2. Member of the Structural Extreme Events Reconnaissance (StEER) Network. Level 1 Membership, which entails being part of the virtual reconnaissance network related to natural hazards and their aftermath on infrastructure (mainly structures and their failure/sustained damage). (2022-now)

3. Guest speaker and activity leader ("Natural Hazards and Oklahoma") for the Department of Civil Engineering in High School Girls Day and GLAMS (Girls Learning and Applying Math and Science) at the University of Oklahoma. (University of Oklahoma 2023-present).
4. Earthquake Engineering Research Institute (EERI) leader for multiple outreach activities in K-12 students motivating them to follow a STEM career with focus on civil and earthquake engineering. Graduate student chapter at the University of Notre Dame (2020-2022).
5. Workshop leader in Expand your Horizons (EYH) (2022) and volunteer (2018) at the University of Notre Dame [<https://sites.nd.edu/expanding-your-horizons/>].

Certification:

When the individual signs the certification on behalf of themselves, they are certifying that the information is current, accurate, and complete. This includes, but is not limited to, information related to domestic and foreign appointments and positions. Misrepresentations and/or omissions may be subject to prosecution and liability pursuant to, but not limited to, 18 U.S.C. §§ 287, 1001, 1031 and 31 U.S.C. §§ 3729-3733 and 3802.

Certified by Kyprioti, Aikaterini (Katerina) P. in SciENcv on 2023-08-07 18:05:30