Stanford



Casey Fleeter Masuda

Research Data Scientist, Marlowe - Research Instrument

Bio

BIO

I am a research data scientist in Stanford's Institute for Human-Centered Artificial Intelligence. I completed my PhD within Stanford's Institute of Computational and Mathematical Engineering (ICME), with my dissertation work under Dr. Alison Marsden focusing on applications of mathematical models and uncertainty quantification for the cardiovascular system. Prior to returning to Stanford, I was employed as a postdoctoral researcher at Calico Life Sciences, where I focused on mechanistic models of aging and aging related disease. I graduated from Harvard University with a Bachelor of Arts in Physics.

ACADEMIC APPOINTMENTS

- Research Data Scientist, Marlowe - Research Instrument

HONORS AND AWARDS

- EDGE Fellow, Stanford University (2015-2022)

BOARDS, ADVISORY COMMITTEES, PROFESSIONAL ORGANIZATIONS

- Member, APS (2017 - 2022)
- Member, SIAM (2015 - 2022)

PROFESSIONAL EDUCATION

- PhD, Stanford University , Computational and Mathematical Engineering (2022)
- MS, Stanford University , Computational and Mathematical Engineering (2018)
- AB, Harvard University , Physics (2015)

LINKS

- LinkedIn: https://www.linkedin.com/in/caseyfleetermasuda/
- Marlowe Website: https://marlowe-research.stanford.edu/

Publications

PUBLICATIONS

- **Geometric uncertainty in patient-specific cardiovascular modeling with convolutional dropout networks** *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*
  Maher, G. D., Fleeter, C. M., Schiavazzi, D. E., Marsden, A. L.
  2021; 386

- **Geometric Uncertainty in Patient-Specific Cardiovascular Modeling with Convolutional Dropout Networks.** *Computer methods in applied mechanics and engineering*
  Maher, G. D., Fleeter, C. M., Schiavazzi, D. E., Marsden, A. L.
  2021; 386
- **Multilevel and multifidelity uncertainty quantification for cardiovascular hemodynamics.** *Computer methods in applied mechanics and engineering*
  Fleeter, C. M., Geraci, G., Schiavazzi, D. E., Kahn, A. M., Marsden, A. L.
  2020; 365
- **Multi-fidelity estimators for coronary artery circulation models under clinically-informed data uncertainty** *International Journal for Uncertainty Quantification*
  Seo, J., Fleeter, C., Kahn, A. M., Marsden, A. L., Schiavazzi, D. E.
  2020