KEVIN WU

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LinkedIn | Google Scholar

EDUCATION

Stanford University	Stanford, CA
Ph.D. Biomedical Informatics	August 2020 - Present
Harvard University	Cambridge, MA
M.Eng. Computational Science and Engineering	Aug 2016 - May 2018
Duke University	Durham, NC
B.A. Statistics	Aug 2011 - May 2015

SELECTED PUBLICATIONS

- Wu, E. and Wu, K, et al. "How medical AI devices are evaluated: limitations and recommendations from an analysis of FDA approvals." ***Nature Medicine*** (2021)
- Lotter, B., et al. "Robust breast cancer detection in mammography and digital breast tomosynthesis using annotation-efficient deep learning approach." ***Nature Medicine*** (2021)
- Wu, K. et al. "Characterizing the clinical adoption of medical AI devices through U.S. insurance claims." **NEJM AI** (2023)
- Wu, Kevin, et al. "Analyses of canine cancer mutations and treatment outcomes using real-world clinico-genomics data of 2119 dogs" ***npj Precision Oncology*** *(*2023)
- Wu, Kevin, et al. "Machine Learning Prediction of Clinical Trial Operational Efficiency" ***The AAPS Journal*** (2022)
- Wu, Kevin, et al. "Collecting data when missingness is unknown: a method for improving model performance given under-reporting in patient populations" ***CHIL Conference*** (2023)
- Wu, E., Wu, K., & Zou, J. "Explaining medical AI performance disparities across sites with confounder Shapley value analysis" ***ML4H*** (2021)
- Wu, K. and Wu, E. Lotter, B. "Validation of a Deep Learning Mammography Model in a Population with Low Screening Rates" ***Neurips*** (2019), Fair ML for Health
- Wu, K. and Wu, E., Cox, D. Lotter, B. "Conditional Infilling GANs for Data Augmentation in Mammogram Classification" ***MICCAI*** (2018), Breast Image Analysis Workshop
- Wu, K., et al. "DataInf: Efficiently Estimating Data Influence in LoRA-tuned LLMs and Diffusion Models" *Under Submission* (2023)

PROFESSIONAL EXPERIENCE

Optum Labs	Stanford, CA
Graduate Researcher	May 2022 – Feb 2023

- Worked in the ML fairness team on methods for efficient data collection under high rates of missingness.
- Culminated in a paper currently under submission.

Stealth Startup (Healthcare AI)	Stanford, CA
Consultant	July 2022 – Jan 2023

- Worked with a Y Combinator-backed startup focused on the deployment of a medical AI device in clinics.
- Consultant for FDA approval process for 510k submission.

FidoCure	Palo Alto, CA
Machine Learning Consultant	June 2021 – Present

- Lead statistical modeling and data mining for precision oncology in canines.
- Develop novel insights into concordance between canine and human oncology treatment effectiveness.

DeepHealth	Cambridge, MA
Machine Learning Software Engineer	Aug 2018 – Aug 2020

- First engineering hire on FDA-approved mammography cancer detection product.
- Startup acquired by the largest provider of outpatient imaging services in the US.

Waymo	Mountain View, CA
Intern	Jun 2017 – Aug 2017

- Worked in a cross-functional role to improve efficiency in deploying and testing self-driving car technology.

AWARDS

Scholarship: Stanford Data Science Scholars (Highly selective interdisciplinary scholarship for two years of funding)
Awards: **Harvard** -- Distinction in Teaching (Fall 2017, Spring 2018), **Harvard** -- 2016 IACS 1st Place Capstone Project