Mikio Tada

New York, NY | +1 (410) 972-7762 | mikiotada198@gmail.com
linkedin.com/in/mikiotada | mikiotada.github.io

Academic & Industry Experience

Junior Specialist **San Francisco, CA**
University of California, San Francisco (UCSF) Apr 2021 - Jun 2024

- Developed AI-empowered, robust, and reliable medical imaging analysis methods to enhance the diagnosis of skin diseases.
- Utilized vision transformer models and image processing techniques to identify cell morphological features associated with target cells, thereby developing virtual biomarkers for skin cancer detection.
- Explored self-supervised learning methods that leverage cell morphological features and molecular representation to acquire meaningful biological embeddings, with potential applications in drug discovery and disease prediction.

Data Scientist **San Francisco, CA**
The Data Institute, University of San Francisco Aug 2020 - Mar 2021

- Computer vision consulting for a large medical device company, delivering software tools to identify features in images of corneal implant devices.
- Built deep learning models to recognize the position of a corneal implant device relative to a patient's tissue.

Data Science Intern **San Francisco, CA**
Virgo Surgical Video Solutions (Tecxhstars NYC '17) Dec 2019 - Jun 2020

- Built an end-to-end pipeline to automatically download videos, extract and preprocess images, and engineer features for convolution neural network models.
- Enabled automatic recording of endoscopic procedures through an image classification model that achieved 98% accuracy.
- Developed a system to automatically classify videos based on the procedure type using a deep learning model. Achieved 95% accuracy, allowing users to search thousands of videos of different procedure types.

Education

Ph.D., Biomedical Science **New York, NY**
Icahn School of Medicine Mount Sinai Aug 2024 - Present

M.S., Data Science **San Francisco, CA**
University of San Francisco Jul 2019 - Jun 2020

B.S., Mathematics **Huntingdon, PA**
Juniata College Aug 2015 - May 2019

Publications

- "Machine-learning convergent melanocytic morphology despite noisy archival slides." **M. Tada**, G. Gaskins, S. Ghandian, N. Mew, M. Keiser, E. Keiser. *biorxiv* , 2024.
- "Artificial Intelligence and Skin Cancer." M. Wei, **M. Tada**, R. Torres. *Frontier Medicine*, 2024.
- "Learning Melanocytic Cell Masks from Adjacent Stained Tissue." **M. Tada**, M. Wei, M. Keiser. *The 25th International Conference on Medical Image Computing and Computer Assisted Intervention (MICCAI) workshop, 2022*.

Abstract

- "Assessing Generalizability and Clinical Utility of AI-enabled Virtual-IHC for Melanocytic Cells" **M. Tada**, M. Wei. *Society for Melanoma Research 21st International Congress*, *2024*.
- "Predicting the Presence of Melanoma from Whole Slide Images Using Multiple Instance Learning" **M. Tada**, A. So, M. Wei. *Society for Melanoma Research 21st International Congress*, *2024*.

Additional Information

Programming Languages - Python, R, JavaScript
Data Analysis and Cloud Computing Tools- SQL, Tableau, Amazon Web Services, Google Cloud Platform, GitHub