

- Publications**
- 2024 Semantics-Aware Attention Guidance for Diagnosing Whole Slide Images
Liu K.*, **Wu W.***, Elmore J., Shapiro L. (*: Equal Contribution)
arXiv preprint arXiv:2404.10894 (2024)
- Google Scholar 2023 VSGD-Net: Virtual Staining Guided Melanocyte Detection on Histopathological Images
Liu K., Li B., **Wu W.**, Shapiro L., Elmore J., Knezevich S., Chang O., May C., Reisch L., Elmore J., Shapiro L.
IEEE Winter Conference on Applications of Computer Vision, 2023
- 2022 Automated Analysis of Whole Slide Digital Skin Biopsy Images
Nofallah S., **Wu W.**, Liu K., Ghezloo F., Elmore J., Shapiro L.
Frontiers in Artificial Intelligence
- 2022 End-to-End Diagnosis of Breast Biopsy Images with Transformers
Mehta S., Lu. X, **Wu. W**, Weaver D., Hajishirzi H., Elmore J. G., Shapiro. L. G.
Medical Image Analysis, 79, 2022.
- 2022 Improving the Diagnosis of Skin Biopsies Using Tissue Segmentation
Nofallah S., Li B., Mokhtari M., **Wu W.**, Knezevich S., May C. J., Chang O. H., Elmore J. G., Shapiro L. G.
Diagnostics, Vol. 12, 2022.
- 2022 Segmenting Skin Biopsy Images with Coarse and Sparse Annotations using U-Net
Nofallah S., Mokhtari M., **Wu W.**, Mehta S., Knezevich S., May C. J., Chang O. H., Lee A. C., Elmore J. G., Shapiro L. G.
Journal of Digital Imaging, April 2022.
- 2021 Scale-Aware Transformers for Diagnosing Skin Biopsy Images
Wu W., Mehta S., Nofallah S., Knezevich S., May C. J., Chang O., Elmore J. G., Shapiro L. G.
IEEE Access, vol. 9, pp. 163526-163541, 2021
- 2021 Applications of the ESPNet architecture in medical imaging in State of the Art of Neural Networks and their Applications
Mehta S., Nuechterlein N., Mercan E., Li B., Nofallah S., **W. Wu**, Lu X., Caspi A., Rastegari M., Elmore J., Hajishirzi H., Shapiro. L.
Academic Press, Vol. 1, 2021, pp. 117-131.
- 2020 MLCD: A Unified Software Package for Cancer Diagnosis
Wu W., Li B., Ezgi M., Mehta S., Bartlett J., Weaver D., Elmore J., Shapiro L.
JCO Clinical Cancer Informatics 4, 290-298, 2020 [[website](#)]
- 2020 Comparison of Fontan Surgical Options for Patients with Apicocaval Juxtaposition

		Wei Z., Johnson C., Trusty P., Stephens M., Wu W. , Sharon R., Srimurugan B., Kottayil B., Sunil G., Fogel M., Yoganathan A., Kappanayil M Pediatric Cardiology, 1-10, 2020
	2018	The advantages of viscous dissipation rate over simplified power loss as a Fontan hemodynamic metric Wei Z., Tree M., Trusty P., Wu W. , Singh-Gryzbon S., Yoganathan A. 2018 Annals of biomedical engineering 46 (3), 404-416
	2017	11C-PIB PET image analysis for Alzheimer's diagnosis using weighted voting ensembles Wu W. , Venugopalan J., Wang M. IEEE Engineering in Medicine and Biology Society (EMBC 2017)
Experience	2022 Fall	ML Engineering Intern , Meta, Business Integrity Team. Advisor: Yash Upadhyay Optimized video integrity models for back-compatibility to minimize the effect of content shifting and declining performance.
	2022 Summer	Research Intern , Microsoft Research, BioML Group. Advisor: Alex Lu, Kristen Severson Developed self-supervised training methods for detecting Parkinson's Disease from whole slide images
	2021 Summer	Vision Intern , Intuitive Surgical, Vision NPI Team Mentor: Fenglei Du Solved viewer alignment problem on Da Vinci Surgical System with 7 degrees of freedom by leveraging reinforcement learning.
	2018 Summer	ML Intern , Siemens, Product Design, Modeling and Simulation Team Mentor: Janani Venugopalan Apply machine learning for computer-aided CNC machining of 3D objects.
Education	2017 - 2023 (expected)	University of Washington, Seattle, WA Ph.D., Biomedical Informatics Advisor: Linda Shapiro Overall GPA: 3.72/4.00
	2013 - 2017	Georgia Institute of Technology B.S. in Biomedical Engineering Advisor: May Wang, Ajit Yoganathan Overall GPA: 3.83/4.00
Teaching	2022	CSE 473 Intro to Artificial Intelligence, TA
	2022	CSE 576 Computer Vision, TA
	2017 - 2023	CSE 373 Data Structure and Algorithm, TA
Awards	2017	President Research Award , Georgia Institute of Technology
	2016, 2017	Faculty Honors , Georgia Institute of Technology
	2014, 2015	Dean's list , Georgia Institute of Technology