Fangzhou Li

Izli at ucdavis dot edu | ♥ GitHub | I LinkedIn | ▲ Personal Website

EDUCATION

Ph.D. Candidate in Computer Science, University of California, Davis	2020-Now
Advisor: Prof. Ilias Tagkopoulos	(Expected 06/2026)
Research Areas: Machine Learning, Natural Language Processing, Knowledge Graph Construction, and Nutrition	
M.S. in Computer Science, University of California, Davis	2020-2023

B.S. in Computer Science and Applied Mathematics, University of California, Davis 2015-2019

UPCOMING PUBLICATIONS

- Li, F., Barboza, M., Weng, C., Ehlers-Cheang, et al. (2024). Elucidating the Molecular Basis of Protein Digestion through Integrated Food Proteomics and Targeted Human Serum Metabolomics. Under review at *Nature Food*.
- Li, F., Youn, J., Millsop, C., & Tagkopoulos, I. (2024). Predicting Clinical Trial Success for *Clostridium difficial* Infections Based on Preclinical Data. Under review at *The AAPS Journal*.
- Li, F., Youn, J., Simmons, G., Kim, S., & Tagkopoulos, I. (2024). FoodAtlas: Automated Knowledge Extraction of Food and Chemicals from Literature. Under review at *Computers in Biology and Medicine*.
- Li, F., Yoo, A., Youn, J., Guan, J., Guyer, A., Hostinar, C., & Tagkopoulos, I. (2024). Prediction of Adolescent Depression from Demographic, Clinical, and Survey Data from ALSPAC Using Machine Learning. Under review at *Scientific Reports*.

PUBLICATIONS & BOOK CHAPTERS

- Aboud, O., Liu, Y., Dahabiyeh, L., Abuaisheh, A., Li, F., Aboubechara, J., Riess, J., Bloch, O., Hodeify, R., Tagkopoulos, I., & Fiehn, O. (2023). Profile Characterization of Biogenic Amines in Glioblastoma Patients Undergoing Standard-of-Care Treatment. *Biomedicines*, *11*(8), 2261.
- Li, F., Youn, J., & Tagkopoulos, I. (2023). Semi-automated Construction of Food Composition Knowledge Base. *The 2nd AAAI Workshop on AI for Agriculture and Food Systems*.
- Risner, D., Li, F., Fell, J., Pace, S., Siegel, J., Tagkopoulos, I., & Spang, E. (2020). Preliminary Technoeconomic Assessment of Animal Cell-Based Meat. *Foods*, *10*(1), 3.
- Li, F. (2021). Detecting Concepts. In C. Molnar (Ed.), *Interpretable Machine Learning A Guide for Making Black Box Models Explainable* (ch. 10.3.). https://christophm.github.io/interpretable-ml-book/detecting-concepts.html

ORAL PRESENTATIONS

- Machine Learning on Glioblastoma Metabolism. Lightning talk at *The 1st Genome Center Research Retreat*, Davis, CA, April 2024.
- Semi-automated Construction of Food Composition Knowledge Base. Lightning talk at *The 2nd* AAAI Workshop on AI for Agriculture and Food Systems, Washington, D.C., February 2023.

POSTERS & ABSTRACTS

Li, F., Youn, J., Simmons, G., Kim S., & Tagkopoulos, I. (2024). FoodAtlas: Automated Knowledge Extraction of Food and Chemicals Through Multimodal Deep Learning. Poster presented at *The 1st Genome Center Research Retreat*. Weng, C., [et al., including Li, F.]. (2024). Combining Proteomics and Metabolomics to Assess Food Protein Digestibility. Poster presented at *The 72nd ASMS Conference on Mass Spectrometry and Allied Topics*.

WORK EXPERIENCE Al Institute of Next Generation Food Systems, University of California, Davis

Al Institute of Next Generation Food Systems, University of California, Davis	Davis, CA
Graduate Student Researcher	2020-Now
 Leading multiple projects involving machine learning applications in food, chemical, a data. 	nd health
 Developed the model selection and analysis pipeline for machine learning projects. M improving the functionality of the pipeline. Administering the lab website to keep publications, people, projects, and news current 	laintaining and t.
 Department of Computer Science, University of California, Davis Teaching Assistant Led discussions, hosted office hours, and graded assignments for 100+ undergraduat Intro to AL 	Davis, CA 2021-2022 tes in ECS170

Davis, CA

2019-2020

• Gave an introductory lecture for deep learning for ECS170 in Spring 2022.

Genome Center, University of California, Davis

Junior Specialist

- Engineered data retrieval and transformation pipeline for a multi-omics compendium project.
- Performed sensitivity analysis for a techno-economic model for animal-cell-based meat.

PROFESSIONAL SERVICE

- Peer reviewer of journals:
 - Nature Communication
 - AStA Advances in Statistical Analysis
- Peer reviewer of workshops:
 - 2nd AAAI Workshop on AI for Agriculture and Food Systems
- Outreach activities:
 - 2024 UC Davis Research Expo. Demoed the FoodAtlas website to the public.

HONORS AND AWARDS

$(\psi z 1, \psi z 0)$, Onversity of Camornia, Davis, Davis, Or $(\psi z 1, \psi z 0)$	JZ4
Travel Support Award (\$1,000), 1st IEEE Conference of Secure and Trustworthy ML, 20)22
Raleigh, NC.	
Graduate Student Fellowship (\$120,457), University of California, Davis, Davis, CA. 2020-20)22
Luther & Maria Davis Scholarship (\$2,000), University of California, Davis, Davis, CA. 2016-20)17