

Mohammad Haft-Javaherian

Managing Member, Haft Advisors

US | [LinkedIn](#) | [Google Scholar](#)

AI leader with a PhD in biomedical engineering who has built and led machine learning teams developing FDA-approved medical AI for clinical trials and GI endoscopy. Now runs a boutique consulting firm applying computer vision and LLMs in medical device and healthcare.

EXPERIENCE

Managing Member

Haft Advisors

Apr 2026 — Present

Irvine, California, United States

Boutique consulting firm applying computer vision and LLMs in medical device and healthcare. Provides fractional head of tech services to early-stage startups and corporations, focusing on integrating AI into workflows with an emphasis on business outcomes. Develops strategic plans to improve operational efficiency and drive tech adoption.

Head of Machine Learning | Director of Machine Learning

Iterative Health (Formerly Iterative Scopes)

Apr 2021 — Mar 2026

Cambridge, Massachusetts, United States

Oversaw the machine learning department with up to four manager reports and 28 professionals, promoted from Manager of Machine Learning to Head of ML reporting to the CEO. Led multiple generations of FDA-approved AI colorectal cancer screening devices, developed a GI foundation model, and owned pharma and Eli Lilly contracts. Established peer review and SDLC practices, cut deployment time from two months to two weeks, and built hiring and career ladder programs.

Manager of Machine Learning R&D | Senior Machine Learning Scientist

Iterative Health

Apr 2021 — May 2022

Cambridge, Massachusetts, United States

Here, I oversaw a team of researchers and engineers developing ML technologies and evolving foundational research to optimize clinical trials.

- ♦ 2X development speed. Led design and implementation of end-to-end production-level pipeline for training, inference, and automatic orchestration, including model registry, experiment tracking, CI / CD, and ML operations (cloud, edge).
- ♦ Set up ML governance, model interpretability / explainability (XAI), ethical AI / bias mitigation, and scalable data / cloud strategy.

Researcher Fellow

Harvard Medical School and Massachusetts General Hospital

May 2019 — Apr 2021

Cambridge, Massachusetts, United States

Developed a novel machine learning method for cardiovascular OCT images using CNNs, a Wasserstein-based critic model, and a novel topological loss. Reduced error 77% (30 to 7 microns) and developed a CNN process for intracoronary PS-OCT 3D images.

Intern Data Scientist

Cleerly

May 2018 — Aug 2018

New York City

I contributed to the design and development of an AI-based (deep learning, computer vision) calcium score and coronary artery ischemia prediction models in cardiac CT images.

- ♦ 7X increase in detected adverse cardiovascular events during 8-year follow-up.

Immersion Internship

New York-Presbyterian Hospital

Jun 2016 — Aug 2016

New York

I worked in MRI imaging, diagnosis, and multiple sclerosis outpatient clinic observerships.

Graduate Research And Teaching Assistant

Cornell University

Aug 2015 — May 2019

Ithaca, New York Area

I studied brain vasculature using computational fluid dynamics and mechanics.

- ♦ Decreased analysis time from 20 hours to just a few minutes by developing ML models (CNN and RNN); highly cited and adopted by several labs worldwide.
- ♦ Attracted 57K+ users with automated crowdsourcing pipelines developed for Alzheimer's research.

Graduate Teaching Assistant

Cornell University

Jan 2015 — May 2015

Ithaca, New York, United States

I taught programming labs and held office hours to support students in the School of Computer Science.

Graduate Research & Teaching Assistant

Cornell University & Other Institutes

Jan 2006 — May 2019

Ithaca, NY

Graduate research and teaching assistant across Cornell University and other institutes during doctoral work in biomedical engineering.

EDUCATION

Massachusetts Institute of Technology

Postdoctoral Fellowship in Computer Science

May 2019 — Jun 2021

Postdoctoral Research Fellow at Harvard Medical School and Massachusetts Institute of Technology

Cornell University

Doctor of Philosophy (PhD) in Biomedical Engineering

Ph.D. in Biomedical Engineering, minor in Electrical & Computer Engineering (2013 to 2019)

M.S. in Biomedical Engineering, minor in Electrical & Computer Engineering (2013 to 2017)

Sep 2013 — Jun 2019

University of Tehran

Bachelor of Science (BS) in Civil Engineering

Sep 2005 — Jun 2009

CERTIFICATIONS

Advanced Leaders Program, Eager Labs Jan 2023

Management Training, LifeLabs Learning Jan 2023

Connect for Developing Leaders, Eager Labs Aug 2022

Colman Leadership Program, Cornell University Jan 2017

Lean Six Sigma Black Belt (ICBB), The State University of New York Jan 2016

Science Communication, Cornell University Jan 2016

Leadership Assessment for Managers, Cornell University Jan 2015

Leadership Assessment for Managers, Cornell University Jan 2015

Summary,

A Topological Encoding Convolutional Neural Network for Segmentation of 3D Multiphoton Images of Brain Vasculature Using Persistent Homology,

Brain capillary networks across species: a few simple organizational requirements are sufficient to reproduce both structure and function,

Deep convolutional neural networks for segmenting 3D in vivo multiphoton images of vasculature in Alzheimer disease mouse models,

Neutrophil adhesion in brain capillaries reduces cortical blood flow and impairs memory function in Alzheimer's disease mouse models,

A Numerical - Experimental Approach to Characterize Fracture Properties of Asphalt Mixtures at Low In - Service Temperatures,

Two-Dimensional Virtual Microstructure Generation of Particle-Reinforced Composites,

Microstructure modeling of rate-dependent fracture behavior in bituminous paving mixtures,

Modeling Rate-Dependent Fracture Behavior of Asphalt Mixtures,

Virtual Fabrication Of Composite Mixtures: In Civil Engineering,

A Cohesive Zone Fracture Model to Predict the Rate-Dependent Fracture Behavior of Heterogeneous and Viscoelastic Asphalt Mixtures,

Modeling to Simulate Fracture Damage in Heterogeneous and Inelastic Asphalt Mixtures Based on Rate-Dependent Cohesive Zone Fracture,

Virtual Microstructure Generation of Asphaltic Mixtures,

SKILLS

Machine Learning · Deep Learning · Computer Vision · Convolutional Neural Networks (CNNs) · Recurrent Neural Networks (RNNs) · Generative Adversarial Networks (GANs) · Large Language Models (LLMs) · Python · Matlab · C++ · Fortran · PyTorch · TensorFlow · Scikit · OpenCV · SQL · NoSQL · Jira · GitHub · Jenkins · Kubernetes · Agile Development · Technology Management · Business Strategy · Managing the Learning Function · Multi-agent Systems · Regulatory Submissions · Leadership · C-Level Communications · Artificial Intelligence (AI) · Strategic Vision · Cross-functional Collaborations · Influencing Without Authority · Translating Strategy · Technological Innovation · Adaptive Leadership · Mission Oriented · Data-driven Decision Making · Team Building · Empowerment · Delegation · Operations Process Improvement · Conflict Management · Change Management · Performance Improvement · Empathy · Social Awareness · Emotional Intelligence · Active Listening · Collaborative Problem Solving · Data Science · Functional Programming · Programming Languages · Software Design · Software · Technology Platforms · Continuous Delivery (CD) · Continuous Integration (CI) · Continuous Integration and

Continuous Delivery (CI/CD) · Agile Methodologies · Amazon Web Services (AWS) · Docker Products · Software Development Life Cycle (SDLC) · Software Development