Mohammad Haft

Head of AI / VP of Machine Learning

Irvine, CA, United States | LinkedIn | Google Scholar

Medtech and healthcare ML leader who took SKOUT, an AI colonoscopy device, through multiple FDA 510(k) clearances and national commercial sales. Built and ran a 28-person ML organization and led technical delivery of pharma AI contracts with Eli Lilly, Pfizer, Altrubio, and Vedanta.

Experience

Managing Member Mar 2026 — Present
Haft Advisors *Irvine, California, United States*
Fractional Head of AI consultancy offering C-suite strategy partnership, 4-week enterprise AI roadmaps, and 8-week proof-of-concept builds. Delivered $1.4M in bottom-line impact for an 8-figure US manufacturer with a quality-assurance prediction model. Grew enrollment 18.5% and revenue 22% as fractional Chief Strategy Officer for an education institute. Built a multi-agent legal AI system with human review for a pre-seed legal-tech startup and a health-robotics prototype from control software through voice AI.

Head of Machine Learning May 2022 — Mar 2026
Iterative Health (formerly Iterative Scopes) *Cambridge, MA*
Led the ML department of four managers and 28 ML scientists, ML engineers, and medical data operations staff, reporting to the VPs, CTO, and later the CEO. Led ML development of SKOUT, a real-time colorectal polyp-detection device, through FDA 510(k) clearances from 2022 to 2025 and national launch. Owned technical delivery of pharma contracts with Eli Lilly, Pfizer, Altrubio, and Vedanta, and built a GI foundation model. Introduced code review and an SDLC, cutting model deployment time from two months to two weeks.

Manager of Machine Learning R&D | Senior Machine Learning Scientist Apr 2021 — Mar 2026
Iterative Health (formerly Iterative Scopes) *Cambridge, Massachusetts, United States*
Led a team of researchers and engineers building ML technology to optimize clinical trials. Built an end-to-end production pipeline covering training, inference, orchestration, model registry, experiment tracking, CI/CD, and MLOps for cloud and edge products, doubling development speed.

Researcher Fellow May 2019 — Apr 2021
Harvard Medical School and Massachusetts General Hospital *Cambridge, Massachusetts, United States*
Developed a deep learning method for cardiovascular OCT images using CNNs with a Wasserstein-based critic and a novel topological loss, cutting error 77% (30 to 7 microns). Built a CNN pipeline for 3D intracoronary PS-OCT images and developed image denoising models using statistical and generative methods.

Intern Data Scientist May 2018 — Aug 2018
Cleerly *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 Jun 2016 — Aug 2016
New York-Presbyterian Hospital *New York*
I worked in MRI imaging, diagnosis, and multiple sclerosis outpatient clinic observerships.

Graduate Research And Teaching Assistant Aug 2015 — May 2019
Cornell University *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 Jan 2015 — May 2015
Cornell University *Ithaca, New York, United States*
I taught programming labs and held office hours to support students in the School of Computer Science.

Research Assistant Jan 2006 — Jan 2014
Cornell University & Other Institutes
I worked with high-performance computing (HPC) clusters and taught Fortran labs / discussion sections.
✦ Developed high-quality image processing pipeline in C++.
✦ Contributed to creating a user-friendly virtual generator for particular composites.
✦ Co-developed Abaqus user element (UEL) in Fortran for rate-dependent cohesive element.

Education

Harvard Medical School / Wellman Center (MGH) & MIT CSAIL Sep 2019 — Jun 2021
Bullock Postdoctoral Fellowship

Massachusetts Institute of Technology May 2019 — Apr 2021
Postdoctoral Fellowship in Computer Science, Dermatology
Postdoctoral Research Fellow at MGH, Harvard Medical School, and Computer Science and AI Lab (SCAIL), Massachusetts Institute of Technology.

Cornell University Sep 2013 — Jun 2019
Doctor of Philosophy (PhD) in Biomedical Engineering
Built CNN and RNN models that cut vascular image analysis from 20 hours to minutes; adopted by labs worldwide.

University of Nebraska-Lincoln Sep 2010 — Jun 2012
Master of Science in Civil Engineering, Min. Construction Management
Generate synthetic images of material samples whose automated finite element simulations in Abaqus match lab results from physical samples to optimize the design space for pavement R&D.

University of Tehran Sep 2005 — Jun 2009
Bachelor of Science (BS) in Civil Engineering

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

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 · Machine Learning · Influencing Without Authority · Computer Vision · 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 · Agile Development · Kubernetes · Amazon Web Services (AWS) · Jenkins · Docker Products · GitHub · Jira · Software Development Life Cycle (SDLC) · Software Development · Deep Learning · Foundation Models · Large Language Models (LLMs) · Retrieval-Augmented Generation (RAG) · CNNs · RNNs · GANs · FDA 510(k) SaMD · Clinical Validation · ML Governance · Bias Mitigation · Python · PyTorch · TensorFlow · scikit-learn · OpenCV · SQL · NoSQL