Vitor Hadad, PhD

(617) 838-5868 | hadad.vitor@gmail.com | halflearned.com | green card holder

Interested in developing safe and efficient AI for social good

Highlights

- Generative AI on edge devices: develops lightweight multimodal models for complex visual perception tasks in limited hardware
- Research Scientist: background in theoretical statistics, causal ML, and adaptive experimentation (bandits)
- Experienced developer: builds reliable, maintainable systems for applied AI/ML in pytorch and the python scientific stack
- · Infrastructure and MLOps: manages multi-node, multi-GPU training and evaluation pipelines on AWS
- · Generalist: communicates effectively with engineers and scientists to align on shared priorities
- Dependable: delivers under tight timelines and complex requirements

SELECT ACHIEVEMENTS

- Publications in top venues: Science Advances, PNAS, ICML, AISTATS, KDD 700+ citations
- Developer of the R/C++ package grf 360k+ downloads; 2024 Stanford Open Source Software Prize

Experience

Amazon, EdgeAl, Devices and Hardware

2021-Now

Applied Scientist II (Lab126)

- Developed and deployed sub-1B-parameter multimodal models for visual scene understanding and question answering on Amazon Echo devices
- Built internal pytorch-based tools for data-centric AI: automatic data augmentation, data valuation
- · Promoted and led synthetic data generation initiatives across the organization
- Designed and patented radar-based ML models for contactless sleep monitoring

Stanford University, Graduate School of Business

2018-2021

Postdoctoral Researcher (PI: Susan Athey)

- · Led the lab's research on adaptive experimentation via multi-armed bandits
- Promoted Al/ML for real-world social good in collaboration with World Bank (20% more contraceptive uptake in Cameroon), NYC Dept. of Finance (10% more parking fee resolution among NYC drivers)
- Published research on statistical properties of flexible algorithms for experiment optimization (contextual bandits)
- Wrote tutorials on statistics and machine learning for audiences of diverse backgrounds
- Authored ML/stats tutorials and mentored 20+ lab members as lab grew 5x

Education

PhD, Economics – Boston College, 2018
MA, Economics – Simon Fraser University, 2013
BA, International Relations – University of Tokyo, 2012