Email: kevin [at] emberml {dot} com https://mengk.me LinkedIn: in/kmeng01 | GitHub: @kmeng01

## **EDUCATION**

## • Massachusetts Institute of Technology

Cambridge, MA

B.S./M.S. Computer Science & Electrical Engineering, Minor in Math. Technical GPA: 5.0/5.0

 $On\ leave$ 

o Coursework: Algorithms for Inference (G), Distributed Systems (G), Applied Cryptography (G), Robotic Manipulation (G), Decision-Making w/ Uncertainty (G), ML for Therapeautic Design (G), Algorithms I/II, Machine Learning, Signal Processing, Linear Algebra, Nanotechnology, Microcomputer Laboratory

# Research

- Publications: Lead-author machine learning papers at ICLR '23, NeurIPS '22, ICML '22.
- Presentations: Talks at Google, NVIDIA, AstraZeneca, MIT CSAIL/BCS, Georgia Tech, NSA, 7-Eleven R&D Labs.

#### Work Experience

• Ember Labs

NYC, SF, Boston

Jan 2023 - Present Co-Founder

• Building a next-generation database. Venture-backed.

• MIT Computer Science and AI Laboratory, Northeastern University

Cambridge, MA

Aug 2020 - Present

- Interpretability (NeurIPS '22): Studied how large language models store and recall factual associations. Collaborated with MIT, Harvard/Northeastern, Technion-IIT researchers. https://rome.baulab.info.
- o Model Editing (ICLR '23): Proposed an algorithm for packing tens of thousands of new memories into a large language model. To be presented at ICLR '23 in Kigali, Rwanda. https://memit.baulab.info.

Gantry

San Francisco, CA

May 2022 - Aug 2022

• Built infra for continual machine learning systems. Led R&D and implementation of a heuristic tree search algorithm for automatically discovering underperforming data slices.

• NVIDIA Corporation

Santa Clara, CA

Machine Learning Research Engineer

Software/Machine Learning Engineer

Research Scientist, Visiting Researcher

Jun 2021 - Nov 2021

o Designed a state-of-the-art pipeline for drug-target interaction (DTI) modeling using a hybrid self-attention and convolution-based architecture. Work to be deployed to NVIDIA's Clara Drug Discovery platform.

• PathZero.AI

Cambridge, MA

Computer Vision Consultant

Jan 2021 - Jun 2021

- Developed PathZero's state-of-the-art computer vision pipeline from scratch; integrated backend models with a web-based user interface for pitching & demos. Startup currently in stealth-mode.
- UT Arlington Innovative Database Intelligence Lab

Arlington, TX

Research Assistant, Visiting Researcher

Jun 2018 - Present

• Wrote three papers on data-driven computational journalism: gradient-based adversarial training on transformer neural networks, an NLP-powered COVID-19 dashboard (EACL '21), and an end-to-end fact checking system (NeurIPS AI4CE '21). Developed software used by thousands of fact-checkers worldwide.

#### Selected Honors

- HackMIT Grand Prize + DRW DataViz Winner: \$4,000 prize, 4 Oculus headsets (#1 Team of 2,000 students).
- Intel ISEF: Best in Category (Top 22 of 7M competitors), 9x Grand/Special Awards. Cumulative \$27,000 won.
- 2020 Coca-Cola Scholar: \$20,000 prize awarded to 150 students in the United States (100,000 applicants).
- 2020 ACM Cutler-Bell Prize Winner: \$10,000 research prize awarded to 4 students in the United States.

## TECHNICAL SKILLS

- Languages: Python, Javascript, Typescript, C, C++, Java, HTML/CSS, IATEX, Bash, VBA
- Frameworks: PyTorch, TensorFlow, Mongo/Express/React/Node, Flask, Nginx, React Native, Android Studio
- Tools: MATLAB, Git, Docker, GCP, AWS, Unity3D, Premiere Pro, AutoDesk, Mathematica, IBM SPSS