Eric Wadkins

Software Engineer @ Google • Mountain View, CA • 617-839-5035 • ewadkins@alum.mit.edu
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Education

Massachusetts Institute of Technology (MIT): **Cambridge, MA**
- **Master of Engineering (M.Eng.) in Computer Science/Artificial Intelligence** – GPA: 5.0 June 2018 – June 2019
- **Bachelor of Science (B.S.) in Computer Science and Engineering –** GPA: 4.6 (Major: 4.8) Aug. 2014 – June 2018
- Certificate of Advanced Undergraduate Research in Artificial Intelligence/Machine Learning May 2018

Skills

Programming Languages: Python, Java, C++, {Java/Type}Script, Node.js, HTML, CSS, MongoDB, Arduino, GLSL, XML, …
Software Engineering: Designing and implementing production services, full-stack applications, and tools and libraries across various disciplines. I've led team-wide and cross-team, multi-quarter efforts, and have experience designing new systems as well as improvements to existing large-scale production systems.
AI Research and Design: Researching and designing artificial intelligence systems using machine learning models, such as neural networks, as well as probabilistic models and classic AI approaches.
Applied ML: Machine learning and its applications, including prediction, machine translation, computer vision, and natural language/speech processing models, using libraries such as Tensorflow, Keras, Torch, and Scikit-Learn.

Experience

Google **Mountain View, CA**
Software Engineer Aug. 2019 – Present
I currently work as a Software Engineer at Google headquarters in Mountain View, California. My team (under Google Core and Ads) develops and applies computer vision techniques and infrastructure to projects across various Google product areas. My work consists of designing computer vision approaches to automate specific tasks that would otherwise require manual intervention. This work includes traditional CV and machine learning approaches, program synthesis, and various algorithms and heuristics (many of which were novel). **Please reach out for more details.**

MIT Media Lab – Fluid Interfaces Group **Cambridge, MA**
Machine Learning Lead, AlterEgo Project June 2018 – June 2019
AlterEgo, which I demoed at TED 2019, is a wearable device that aims to augment humans with the information and computational power of a computing device in a natural way. My research focuses on creating a continuous "silent speech" recognition system that allows humans to converse covertly – without any speech or movement, instead with electric signals from the brain produced during subvocalization – with machines, AI assistants, and other people.
Media Lab Profile: http://media.mit.edu/people/ewadkins Thesis: http://dspace.mit.edu/handle/1721.1/123121

NASA – National Aeronautics and Space Administration **Washington, D.C. Area**
Machine Learning Intern @ Goddard Space Flight Center Jan. – Feb. 2018
I interned with NASA at the Goddard Space Flight Center, where I used machine learning to apply satellite data to applications of aerosol science. My project focused on using the MODIS Terra and Aqua satellites' global monitoring capabilities and the GEOS-5 forecasting model for the prediction of unknown atmospheric features around the world.

Google **Los Angeles, CA**
Software Engineering Intern June – Aug. 2017
As an intern at Google's Venice, Los Angeles office, my work included the design, implementation, testing, and concurrent optimization of an intelligent automated tool for YouTube's internal infrastructure.

Research Laboratory of Electronics – Quantum Photonics Laboratory **Cambridge, MA**
MITRE Undergraduate Research and Innovation Scholar *(3 semesters)* Feb. 2017 – May 2018
I led a yearlong research project, sponsored by MITRE, that aimed to improve instrument localization and autonomous navigation in the lab. Prior work includes developing machine learning- and computer vision-enabled algorithms to automate processes in the lab, such as detection and examination of data near nitrogen-vacancy centers in diamond.

Computer Science and Artificial Intelligence Laboratory (CSAIL) **Cambridge, MA**
Undergraduate Researcher Sept. – Dec. 2016
My work for the InfoLab Group focused on a video action recognition system capable of recognizing scenes based on the physical properties of the objects within them, providing a method of querying these scenes using natural language.

Diameter Health **Newton, MA**

Software Engineering Intern *(2+ years: summers, winters, semester work)* June 2015 – Feb. 2017

At Diameter Health, I designed and developed full-stack applications using proprietary algorithms to analyze and reveal insights in healthcare data. Prominent projects include an advanced free-text medication signature parser using NLP techniques, and a predictive tool, funded by the NIH, to assess the risk of Chronic Kidney Disease.

➔ ***To learn more about me and some of my projects/papers/master's thesis, please visit*:** http://ericwadkins.com