

Cambridge, MA

## **EDUCATION**

Massachusetts Institute of Technology

Masters of Engineering in Computer Science & Engineering

Distributed Systems, Computer & Network Security, Computer Vision

Cambridge, MA June 2014

GPA: 5.0 of 5.0

Massachusetts Institute of Technology

Bachelors of Science in Physics, Computer Science & Engineering

Database Systems, Computer Security, User Interface, Computational Photography, Computer Graphics Algorithms I & II, Computer Systems, Artificial Intelligence, Web Programming, Software Construction

Linear Algebra, Discrete Math, Probability & Random Variables, Differential Equations, Calculus I & II

Cambridge, MA

Sept 2011 - May 2013

GPA: 4.7 of 5.0

June 2013

**EXPERIENCE** 

Google Cambridge, MA Mar 2018 - Present

Software Engineer, Google Assistant

Explored and evaluated methodologies in the Assistant to help users store and retrieve facts with high accuracy, including design of storage format and retrieval methodology

Created new flows to allow users to expand the breadth of information within their personal knowledge graph, including adding the ability to reference photos

Expanded the question-answering capabilities of the Assistant by incorporating personalized information, allowing for answers which require public and personal knowledge

**Nara Logics** Cambridge, MA Machine Learning Engineer Feb 2017 – Jan 2018

Explored models for movie similarity and recommendations of 23M users with approx. 2B total

views, finalizing a production model which achieved ~40% recall@50 for recommendations Created tf-idf models for document similarity and 1D convolutional models for URL multiclass classification, both used for recommending similar content articles to users

Developed framework for reducing the number of models parameters prior to deployments Illumio

Sunnyvale, CA Software Engineer Sept 2014 - Jan. 2017

Re-architecture of application for full operation across the WAN, including distributed computations and cache invalidations

Design and implementation of RESTful API's for various components of security policy Infrastructure for dynamic configuration of services and automatic failure detection Architecture and implementation of telemetry server for notification of downed nodes. Design and setup of pipeline for aggregation of flow logs from all nodes.

**LEADERSHIP** 

Camp Kesem MIT Cambridge, MA

Fundraising Coordinator, Public Relations Coordinator, Program Counselor

Raised over \$70,000 for children of cancer patients to attend camp freely with fellow coordinators Led a team of 8 counselors to engage campers to have fun and participate, while managing behavioral issues and maintaining safety

Zeta Beta Tau Fraternity, MIT

Cambridge, MA Philanthropy Chair Jan - May 2012

Organized a fundraiser to increase awareness of our organization, and raised over \$2,000 for Boston Children's Hospital

**ACHIEVEMENTS** 

Frank Lee Galeener Scholarship (2010 - 2013)

Eugene and Margaret McDermott Scholarship (2009 - 2013)

David A. Chanen Writing Award for technical writing (2012)

SKILLS

Language: Python, C++, Ruby, SQL, Golang, Java, Bash, Git

Tools: Linux/UNIX, Django, Django Rest Framework (DRF), Docker, Docker Swarm, Rails, NumPy/SciPy, PyTorch, TensorFlow, Keras Systems: PostgreSQL, Redis, Memcached, MySQL, Nginx, Phusion Passenger, Thin, Fluentd, Chef, AWS, GCP