LIOR HIRSCHFELD

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EDUCATION

Massachusetts Institute of Technology Cambridge, MA

September 2017 - Present

Candidate for Bachelor of Science in Computer Science, Mathematics and Minor in Literature

Overall GPA: 5.00/5.00

- Relevant Coursework: Machine Learning, Analysis of Algorithms, Theory of Computation, Differential Equations, Linear Algebra
- Awards: AQR Best Fintech Project at HackMIT 1st Place, Google Games 2018 3rd Place

Phillips Academy Andover, MA

September 2013 - June 2017

High School Diploma

• Awards: Cum Laude Society, AP Scholar with Distinction, Caroline D. Bradley Scholarship

WORK EXPERIENCE

The Markov Corporation Palo Alto, CA

June 2018 - August 2018

Software Engineering Intern

- Designed and implemented event-based logging infrastructure to enable quick, flexible queries with ElasticSearch.
- Engineered administrative web-dashboard to support transparent access and visualization of cloud-based logs.
- Streamlined bug detection and resolution by building Slack bot to automatically notify employees of device failure and interruption.

Twitch Interactive San Francisco, CA

January 2018 - February 2018

Software Engineering Intern

• Constructed dashboard to unify data from unsystematic API endpoints and provide live, comprehensive debugging of video streams.

PAPERS AND PUBLICATIONS

MIT Department of Mathematics

September 2017 - May 2018

- Co-authored graph theory paper with Dr. Asaf Ferber titled "Co-degrees Resilience for Perfect Matchings in Random Hypergraphs."
- Established an upper bound on the number of edges that can be removed in a random hypergraph while retaining a perfect matching.

PA Department of Astronomy

March 2016 - May 2016

- Measured the quantity of light reflected from three unresearched, near-earth asteroids over the course of several months.
- Collected results to produce two 'light curves' and predict the asteroids' orbital periods; published in *The Minor Planet Bulletin*.

PROJECTS

Cryptonite

http://crypt-onite.herokuapp.com/

- Won HackMIT's "Best Fintech" award with web app that predicts Ethereum's price by performing sentiment analysis on tweets.
- Trained SVM to identify tweet sentiment, used linear regression to predict price changes, and presented results on Django site.

Exploring the Effect of ML on Social Media Bots

http://mlanalysis.herokuapp.com/

- Built two Reddit bots which use reinforcement learning and have collectively received over 2,000 "upvotes" from the community.
- Investigated the effects of machine learning on their behavior by constructing a control group and comparing their performance.

Design of Book Covers by Genre

http://liorh.com/images/bookcovers.png

- Averaged the covers of popular GoodReads books, separated by genre, to identify recurring thematic and marketing choices.
- Developed visualization of results which received over 67,000 views on Reddit and was reposted by ABC Science.

LEADERSHIP

Gift of Life: Bone Marrow Registry

December 2017 - Present

Fundraiser Organizer

- Organized mailing campaigns which have raised approximately USD\$2500 for the registry so far.
- Managed on campus publicity stunt, collecting over USD\$1000 and signing up 100 student and faculty members to the registry.

Code for Good

September 2017 - December 2017

Nonprofit Consultant

• Improved the Massachusetts Nonprofit Network's data visualization tool to allow city to city comparison for status and race.

SKILLS AND INTERESTS

Languages English (Native), Hebrew (Native)

Software Python (Django), JS (React, Redux), Golang, Java, CSS

Interests Fantasy, Antique Books, Skiing, Yoga, Board Games, Mechanical Watches