

BENJAMIN C. EYSENBACH

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bce@mit.edu

EDUCATION

Massachusetts Institute of Technology (MIT), Cambridge, MA

Sept. 2013 - June 2017

Candidate for Bachelor of Science in Math

Relevant Courses: Algebra (18.06, 18.701), Algorithms (6.046, 6.854, 6.856), Bayesian Modeling (6.882), Computer Graphics (6.837), Computer Vision (6.869), Inference (6.437, 6.438), Machine Learning (6.867, 9.520)

Relevant Course Projects: Topic Modeling with LDA and SVI, Stochastic Block Models, DNA Compression using LDPC codes, Cipher Breaking using MCMC, Randomized Splay Trees; Visualizing Stereo Reconstruction.

TEACHING

6.008 Introduction to Inference (Prof.s Greg Wornell and Polina Golland) - *Teaching Assistant*

Sept. 2016 – Dec. 2016

6.042 Math for Computer Science (Prof. Albert Meyer) - *Teaching Assistant*

Jan. 2015 – May 2015

RESEARCH/WORK EXPERIENCE

Computer Vision Group (Prof. Torralba) in **CSAIL** at **MIT**, Cambridge, MA

Jan. 2015 - present

Undergraduate Researcher

- Constructed model and dataset to extend visual question and answering to character beliefs. (In submission to CVPR)
- Developed a tool for video segmentation using deep learning. (Presented at EECSScon 2015: 2nd Place Oral Presentation)

Uber Advanced Technologies Center, Pittsburgh, PA

May 2016 – Aug 2016

Machine Learning Intern

- Contributed to the research and development behind Uber's self-driving technologies. (Project details are under NDA.)

Xerox Research Centre, Bangalore, India

Jan 2016 – Jan 2016

Research Intern

- Developed algorithm for robust optimization over predictions of machine learning models.

Creative Technology Lab at **Adobe**, San Francisco, CA

June 2015 – Sept 2015

Research Intern

- Built automatic video tagging system using deep learning to recognize objects, scenes, and actions.

Institute for Interdisciplinary Information Sciences at **Tsinghua University**, Beijing, China

June 2014 – Aug 2014

Li and Fung Scholar

- Studied algorithmic game theory and coded simulations to verify proposed solutions.

Senseable Cities Lab at **MIT**, Cambridge, MA

Sept. 2013 – May 2014

Undergraduate Researcher

- Performed image analysis and system integration for an autonomous quadcopter system.

Fluid Interface Group in **MIT Media Lab**, Cambridge, MA

Sept. 2013 – Dec. 2013

Undergraduate Researcher

- Integrated a JS physics engine into LuminAR, the lab's AR platform, to allow physics objects to interact with virtual ones.

Acturnum, Bedford, MA

June 2013 – Aug. 2013

Intern

- Built a recommendation engine for social networking app; constructed a JS tool to automate testing of the iPhone app.

Harvard School of Engineering and Applied Sciences, Cambridge, MA

May 2013 – June 2013

Intern

- Created a game using JS to crowdsource study of molecules for use in solar panels.

TOOLS

Coding: Python (NumPy, SciPy), Bash, MATLAB. Familiar with C, C++

Visualization: Matplotlib, JS

Machine Learning: Caffe, Torch, scikit-learn, OpenCV

Software: git, vim, Linux, LaTeX, MS-Office.

LEADERSHIP

Floor Representative for Maseeh Hall, MIT

Sept. 2013 – Jan. 2014

- Elected to manage floor budget and to help plan dorm activities and study breaks.

ACTIVITIES

MIT Unmanned Aerial Vehicle Team – Developed robots tracking and image stitching systems.

MIT Rocket Team – Designed sensor system for cold-flow and hot-fire tests. Wrote software to display real-time data.

Long Distance/Trail Running