

# Michele Pratusevich

mprat@alum.mit.edu | (617) 855 9497 | [www.mprat.org](http://www.mprat.org)

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## EDUCATION

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### Massachusetts Institute of Technology (MIT)

*M. Eng. in Electrical Engineering and Computer Science*

*Sept 2014 - June 2015*

- Advisors: Prof. Robert Miller and Prof. Antonio Torralba
- Thesis: *EdVidParse: Detecting People and Content in Educational Videos*
- Selected coursework: Machine Learning, Computational Photography, Computer and Machine Vision
- GPA: 4.75 / 5.0

### Massachusetts Institute of Technology (MIT)

*S.B. in Electrical Engineering and Computer Science. Minor in Mathematics.*

*Sept 2009 - June 2013*

- Certificate in Advanced Undergraduate Research in EECS

## EXPERIENCE

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### Ditto Labs, Inc.

*Cambridge, MA (USA)*

- Senior Computer Vision Engineer, July 2015 - present
- Responsible for advancing Ditto's computer vision technology as part of a small team.
- Create and maintain active learning object localization and detection pipeline for user-generated content.
- Develop high-throughput distributed evaluation system with neural networks and RabbitMQ.

### User Interface Design Group and Torralba Vision Group, CSAIL, MIT

*Cambridge, MA (USA)*

- Graduate Research Assistant, September 2014 - June 2015
- Used a deep neural network to automatically annotate educational videos, extracting people and educational content in near real time.
- Feature extraction with Caffe deep learning framework and classification with SVMs and hard negative mining.

### MEET (Middle East Education through Technology)

*Jerusalem, Israel / Palestine*

- Head of curriculum and computer science instructor, June 2013 - September 2014
- Developed, managed, and taught 3-year computer science curriculum for high school students with the goals of learning Python, web development, and technical teamwork skills
- Taught Israeli and Palestinian high school students computer science (Python, Django web development). Mentored student project teams using technology (website, mobile apps) to create social and political change in the region

### Computer Graphics Group, CSAIL, MIT

*Cambridge, MA (USA)*

- Quanta Research Fellow for Advanced Undergraduate Research, September 2012 - June 2013
- Designed, built, and tested an iOS app to accurately localize multiple photos (SLAM) by creating a 3D depth field using PointCloudSDK, homography calculations, and RANSAC

## SKILLS

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- Languages: English (native), Russian (proficient), Spanish (proficient)
- Programming: Python, C++, MATLAB, Objective-C, RabbitMQ, JavaScript
- Web: Django / Flask, HTML, CSS, jQuery, MySQL
- Tools: Caffe, IPython, NUMPY / SciPY, OPENCV, OPENGLES, L<sup>A</sup>T<sub>E</sub>X, vim, git, SolidWorks CAD, Arduino, Jenkins

## ACTIVITIES AND INTERESTS

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- Weekly introductory Python exercises: <http://practicepython.org>
- Educational game for learning basic terminal commands: <http://mprat.org/Terminus>.
- Github / bitbucket: <http://github.com/mprat>, <http://bitbucket.org/mprat>