

# ELLIOT BARTEL

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## EDUCATION

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Cambridge, MA                                      Massachusetts Institute of Technology                                      2012-2016

- **S.B. in Computer Science and Engineering**, June 2016.
- **Coursework:** Mobile & Sensor Network Computing, Computer Vision, Machine Learning, Design & Analysis of Algorithms, Computer System Engineering, Computational Photography.
- **Skills:** Python, C++, Java, Tensorflow, Caffe, Pandas, OpenCV.

## AWARDS

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**First Place** MIT Deep Learning MiniPlaces Scene Recognition Challenge, out of 20 teams.                                      Fall 2015  
**Grand Prize** MIT 6.670 iOS Game Development Competition, out of 15 teams.                                      Winter 2014  
**First Place** Software Design in Final Project, MIT Software Construction Course, out of 60 teams.                                      Fall 2014

## WORK EXPERIENCE

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Dec. 2016 - present                                      **Atlas5D**                                      Computer Vision Research Scientist  
R&D

- Worked to create a device which, using a depth sensor, captures clinical-grade motion measurements of patients
- Trained deep learning classifier with Tensorflow to differentiate a patient from other people
- Designed and implemented pipeline for processing training data and organizing training and validation sets
- Researched state of the art object detection and segmentation methods to advise product direction

Spring 2016                                      **MIT Computer Science and Artificial Intelligence Lab**                                      Undergraduate Researcher  
Vision Group

- Evaluated accuracy of convolutional neural networks performing pixel-wise semantic image segmentation
- Wrote Python scripts using PyCaffe library to test the performance of Caffe-implementations of CNN's on images taken from moving vehicles

Summer 2015                                      **Google Inc.**                                      Software Engineering Intern  
Android Wear Applications

- Added a new type of note to Keep (Android's first party reminders app) for Android Wear watches
- New note allows users to sketch vectorized drawings on their watch and efficiently sync those notes to a phone over the bluetooth pairing

Summer 2014                                      **Apple Inc.**                                      Software Engineering Intern  
Interactive Media Group

- Applied machine learning and computer vision algorithms to prototype a potential feature for OS X and iOS
- Programmed a stand-alone application and UI in Objective-C and C++ showing the accuracy and usefulness of certain computer vision algorithms in making the new feature possible
- Presented the application to John Stauffer, Apple Vice President, to demonstrate the feature's benefits