## Banti Gheneti

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### Education Massachusetts Institute of Technology

Vecna

June 2017

January 2016

Candidate for a Bachelor of Science in Electrical Engineering and Computer Science

## Professional Experience

Robotics Software Engineering Extern

- Rewrote a plain javascript task graph tool using React.js and Redux
- Remodeled a Backbone, is view in React, is and presented a plan for transitioning a whole app

Red Hat May – August 2015

Systems Management Intern

- Configured CI pipelines in a Jenkins environment to trigger and run tests, using Jenkins Job Builder
- Wrote bash and ansible scripts to build relevant docker images and automate the testing of software

## **MIT Sloan School of Management**

July - October 2014

Data Research Intern

- Created scripts to obtain and organize data on 370+ project researcher citations and reputations, using the Scopus REST API
- Analyzed researcher and project indicators to determine correlations between project characteristics and online platform fundraising success, using Stata

# Extracurricular Projects

#### **Construction Project Leader**

- Directed a multidisciplinary team during the planning and design process of a three story lumber fort
- Interfaced with campus safety representatives and contractors to satisfy building code
- Coordinated teams of students during the the safe construction of the fort using power tools

### Mobile Autonomous Systems Lab (MASLAB) Competition 2015; 2nd place

- Devised and implemented data structures and algorithms for a robot in C++ to detect and locate target cubes, walls, and environment features on the playing field from a webcam input
- Developed firmware for GPIO and SPI-based peripherals

#### Remote Radiation Monitoring Network; MakeMIT 2015 3rd Place in Finals

- Engineered code in C to record a leaf node's environmental variables and transmit them to the base node using XBee radio modules
- Parsed the serial output using a node.js server running on the Raspberry Pi base node and transmitted json objects with sensor cube data to the central server
- Made a web portal hosted by the central server for displaying sensor measurements

## Relevant Courses

#### 6.819 – Advances in Computer Vision

- Explored a range of image features,, transformations and strategies for object recognition
- Used particle swarm optimization to determine hand pose from synthetic shadow data for the final

### 6.034 - Artificial Intelligence

 Created and performed operations on decision trees, Bayes nets, neural nets, and SVMs to classify complex data sets and make intelligent decisions

## 6.046 – Design and Analysis of Algorithms

- Applied algorithms on a variety of data structures to efficiently solve a wide range of search, sort, numeric, graph, network flow and hash-based computational problems
- Derived problem complexities

#### 6.005 - Elements of Software Construction

- Developed code collaboratively using the Git version control system
- Learned development and testing strategies for writing concurrent code in Java

### 6.003 – Signals and Systems

• Analyzed discrete and continuous-time signals and systems using Fourier, Laplace and Z transforms

## **Currently Enrolled:**

6.141 – Robotics: Science and Systems I

6.302 – Feedback Control Systems

## Applicable Skills

General Programming – Python, Java, Unix, Matlab, ROS

Web Programming – Javascript, HTML5/CSS, Jquery, Node.js, Meteor.js

**Spoken Languages** – English, Dutch, German, Oromo, French