

## Projects

### Arduino Micro Arcade

December 2017

- Designed, together with three of my friends, a Mario-like game using Arduino Uno and a 16x32 pixel LED board.
- The player is displayed as a cube of 2x2 pixels, and uses a tiny remote control in order to move around.
- We applied what we had learned in EECS 183 - Elementary Programming Concepts - by planning the structure of our classes and their types.
- Our hard work and cooperation resulted in a project that won the EECS 183 Computer Showcase.

### Image Resizing Algorithm

May 2018

- Coded a program that resizes an image to a requested resolution without damaging the proportions.
- The program receives an image in a PPM format, and identifies each pixel with a weight according to how much it is "important" to the overall picture.
- Then, according to the requested size, the program removes or adds the seam of pixels with the least total weight.

### Piazza Posts Classifier

June 2018

- Coded a Machine Learning program that classifies forum posts by topics.
- The program uses a binary tree traversal algorithm. The training stage is done on a CSV file which results in storing unique words and labels in the tree.
- In the execution stage, the program receives a content and labels it. This is done by traversing through the binary tree, identifying unique words in the content, and matching it to the right label.

## Experience

### Israel Defense Forces

Jan 2013 - Jan 2016

#### Designated Technology Sergeant

- Three-year service in the Israeli intelligence corps - "Modi'in".
- I was responsible for technology that was designated for military missions.

### Math and Physics Tutor

June 2011 - Apr 2016

- Throughout high school and my military service, I taught math and physics to middle school and high school students. During peak months, I met with up to 7 students every week.
- As part of my efforts to improve as a teacher, I learned how to understand concepts in a more thorough way.

### "Morasha" Elementary School

March 2016 - Apr 2016

#### Homeroom Teacher

- I was a substitute homeroom teacher of a 6th grade class in Petah Tikva, Israel.
- I had a study plan and I came prepared for each class knowing what to cover.
- I was checking homework, conducting quizzes, and dealing with discipline incidents.

## Education

University of Michigan, Ann Arbor MI

Computer Science

Expected graduation date: May 2021

GPA: 3.12

University of Michigan Track and Field Varsity Team

## Skills

Programming C++, Python, MATLAB, Java, Arduino.

Applications Microsoft Office Suite, Photoshop, Sony Vegas Pro.

Languages English, Hebrew, Japanese.

## Honors & Achievements

- EECS 183 Computer Showcase Winner
- Israeli Junior Triple Jump Record Holder
- Israeli National Champion in Long Jump 2014