
Projects

Arduino Micro Arcade

December 2017

- Together with three of my friends, we designed 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've learned in EECS 183 (Elementary Programming Concepts) by planning the structure of our classes and their types.
- Our code, among others, consists of input function, time increment function, gravity function, jump function, space and borders function, and output RGB-pixel function.
- 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

Military Service

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

Merkaz District, Israel

June 2011 - Apr 2016

Math and Physics Tutor

- 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, 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