

# Daniel Butael

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## EDUCATION

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University of Michigan, Ann Arbor MI

Sept. 2017 - May 2021

- **B.S.E in Computer Science, GPA: 3.11/4.00**
- **Coursework** - Data Structures & Algorithms (EECS 281), Discrete Math (EECS 203), Introduction to Computer Organization (EECS 370), Programming & Introduction to Data Structures (EECS 280).
- **University of Michigan Track and Field Varsity Team**

## PROJECTS

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Piazza Post Classifier

June 2018

- Created a Machine Learning program that classifies Piazza (Q&A website) posts by topics.
- Trained the "NLP Classifier" model using log-prior probability scores with CSV files.
- Applied the binary search tree algorithm to store unique labels, and retrieve them based on the input's content.
- Achieved an accuracy of 87.0% for 3000 posts.

Image Resizing Algorithm

May 2018

- Developed a program that resizes an image while adapting its content and layout.
- Applied the seam carving technique, a content-aware resizing, in which pixels are rated based on noticeability.
- Implemented a seam algorithm that calculates and identifies noticeable pixels.
- Achieved accurate results that seems natural to the naked eye.

Arduino Micro Arcade

Dec. 2017

- Created a Mario-like game using Arduino microcontroller, potentiometer, and an LED screen.
- Applied an extensive structure of different classes to account for each game component.
- Won the EECS 183 Computer Showcase.

## EXPERIENCE

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Israel Defense Forces, Intelligence Corps - Designated Technology NCO

Jan. 2013 - Jan. 2016

- Served three years in the Israeli Intelligence Corps - "Modi'in".
- Responsibility for classified technology designated for military operations.

"Morasha" Elementary School - Homeroom Teacher

March 2016 - Apr. 2016

- Instructed sixth grade students in math, Bible, and Talmud.
- Created a study plan, and guided my students accordingly.
- Conducted quizzes, checked homework, and dealt with discipline.

Math and Physics Tutor

June 2011 - Apr. 2016

- Tutored up to seven high school students in math and physics every week.
- Refined and conveyed concepts thoroughly.

## SKILLS AND INTERESTS

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- **Programming** - C++, Python, MATLAB, Java, Arduino.
- **Languages** - English (fluent), Hebrew (fluent), Japanese (intermediate).
- **Interests** - Guitar, philosophy, history, penmanship, Japanese culture, and origami.

## HONORS & ACHIEVEMENTS

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- **EECS 183 Computer Showcase Winner Fall 2017**
- **Israeli Junior Triple Jump Record Holder (since 2013)**
- **Israeli National Long Jump Champion 2014**
- **Big Ten Conference Triple Jump Finalist 2019**
- **European Junior Championship Qualifier 2013**
- **Balkan Triple Jump Championship Finalist 2016**