# RYAN ELLIS

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#### **EDUCATION**

## University of Maryland, College Park

College Park, MD May 2020

B.S. Computer Science Minor in Statistics

**SKILLS** 

**Programming Languages** Java (*Proficient*), Python (*Familiar*), HTML, CSS, Javascript, C, Ruby

**Frameworks/Tools** Git, Bootstrap, MySQL, DynamoDB, Lambda

#### **EXPERIENCE**

#### **Software Developer Intern**

Almelo, Netherlands

EuroDev

Summer 2018

- Developed internal tool written in Python to automate filtering process improving efficiency and saving over 200 hours per year for the marketing department.
- Lead redesign of new landing page for website, created optimization's that lead to 20% faster load time by reducing page size and implementing caching.

Backend DeveloperCollege Park, MDTechnicaApril 2018 - Current

- Worked with a team of 12 people to develop an IOS/Android application that would allow users to check-in, manage schedule, and receive notifications.
- Implemented database to handle requests from the front end using DynamoDB and connected login functionality from the API gateway to the back-end using Lambda .

DirectorDouglas, MALearn to Code\_Oct. 2015 - May 2016

- Created a 10-week after school program that used the Scratch programming language to provide middle school students with an introduction to computer science.
- Modified lesson plans from Harvard's CS50 course to develop a class structure that was more suitable for a middle school audience and created programming projects to reinforce subjects taught in class.

#### **PROJECTS**

# **Snap to Run** *Java, Python*

devpost.com/software/snap-to-run

# Winner of the Best Use of AWS Prize Dragonhacks 2018

- Android application that enables users to take a picture of hand written Python code and be sent a text
  message of the compiled result.
- The front-end of the application was created in Android Studio using the Android SDK and implements the Google Vision API to perform optical character recognition (OCR) on the image.
- The back-end server is written in Python and hosted on AWS where it listens for HTTP requests from the android app using a RESTful API. The server also implements the Twilio API to text the results of the Python code back to the user after it has been converted from plain text.

## Reddit Chess Bot Python, MySQL

github.com/ryan-ellis/Reddit-Chess-Bot

- Reddit bot that can be summoned with a text command in any comment thread, takes a specific chess position as an input and attempts to return a professional chess game that features the same position.
- Implemented using the Python Reddit API Wrapper to view and respond to comments and the Beautiful Soup 4 package to perform web scraping on a chess database when searching for positions.
- The bot is hosted on AWS and uses a MySQL database to store information regarding the users it interacts with.

#### **EXTRACURRICULARS**

**Clubs/Activities** 

Astrophotography, Chess Club (*Treasurer*), Terrapin Hackers (*Event Organizer*) Intramural Basketball, Golf Club