

# Connor Barker

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## SKILLS

### PROGRAMMING (2+ YEARS)

Java • Shell (Unix) • JavaScript  
Python • XML

### PROGRAMMING (FAMILIAR)

Racket • Objective-C •  $\LaTeX$   
C • C++ • HTML • C#

### TOOLS

Heroku • Android Studio • Django  
node.js • Git • Pygame • Pygal  
VirtualBox • GitHub • SQLite

## EDUCATION

### UNIVERSITY OF WATERLOO

CANDIDATE FOR BACHELOR OF  
APPLIED SCIENCE

HONOURS COMPUTER ENGINEERING

EngSoc Class Representative  
Expected 2022 | Waterloo, ON

### ECOLE JEANNINE MANUEL

ACHIEVED A FINAL SCORE OF 40  
POINTS ON THE INTERNATIONAL  
BACCALAUREATE  
Grad. May 2017 | Lille, France

## LINKS

Github:// [connorbarkr](#)  
LinkedIn:// [connor-barker](#)  
DevPost:// [connorbarkr](#)

## EXTRACURRICULAR

## EDUCATION

DIGITAL MEDIA ACADEMY  
(STANFORD BRANCH)

- C++ & C# course
- Game-making with Java
- Functional programming
- Object-Oriented Programming

### PERSONAL STUDY

- Python Crash Course, Eric Matthes
- Eloquent JavaScript, Marijn Haverbeke
- Android Programming: The Big Nerd Ranch Guide

## EXPERIENCE

### COSIMO - AUDIO GALLERY

#### SUMMER INTERN

July 2014 | Brooklyn, NY

- Worked on a small team to produce an mobile platform for creating location-based audio snippets, with applications such as triggering a clip when a user approaches a painting in a museum
- Created visual data representations of MTA wireless-equipped subway stations as part of a sales pitch and presentation on application use-cases
- Responsible for database management and cleanup, specifically regarding reorganizing valid data and reducing the volume of unnecessary test data
- Collaborated with employer to research data and create dynamic visuals for contract from a professor of social biology

### ECOLE JEANNINE MANUEL

#### PROGRAMMING TEACHER

Aug 2013 - February 2014 | Lille, France

- Designed and taught a curriculum meant to introduce Python programming to novices, including concepts ranging from if/else statements to functional programming
- Used personal experience to encourage students via problem-based learning

## PROJECTS

### AMSAT TWITTER BOT | MARKOV CHAIN-BASED WEB APPLICATION

- Created a Twitter bot in JavaScript using node.js and assorted libraries
- Implements Markov chains to parse text and create tweets
- Markov generator was custom-built, rather than sourced
- Makes efficient use of RESTful and streaming Twitter APIs

### TOTALLYNOTSPACEINVADERS | PYTHON VIDEO GAME

- Created a run-anywhere version of Space Invaders with custom art
- Runs from the command-line using only a pygame install
- Designed using pure code, not a game-maker engine
- Features include random background generation, proportionally increasing difficulty, and a self-saving high score
- Demonstrates extensive use of functional programming concepts, as well as modular functions

## VOLUNTEER WORK

### HABITAT FOR HUMANITY

#### TEAM MEMBER ON FOUNDATION-LAYING PROJECT

April 2016 | Kuala Lumpur, Malaysia

- Worked on digging and pouring a foundation for a home
- Assumed miscellaneous leadership roles involving work-site planning
- Volunteered for additional responsibilities regarding the organization of labor effort, such as materials transport to the site
- Displayed teamwork in advancing the project ahead of schedule to the wall-building phase