

TECHNICAL SKILLS

PROGRAMMING: Java, Python, C, C++, HTML5, CSS3, JavaScript, PHP, LaTeX, Bash

FRAMEWORKS: React, NodeJS, Bootstrap4

DATABASE: MongoDB, MySQL

VERSION CONTROL: Git

SYSTEMS: Windows, Linux

INTERESTS: DevOPS, Project Management, Machine Learning, Cloud Services, Back-End Developemet, Database

EDUCATION

David Katz · Sept. 2019 to May 2023

Bachelor of Computer Science Class of 2023

Minor in Business Administration

GPA : 10.5/12

Dean's List Recipient

A.D. Dunton Scholarship Recipient

EMPLOYMENT

Carleton University · **Teaching Assistant (Discrete Structures I)** · Jan. 2021 to May 2021

- Engaged with students through weekly office hours where students could fill missed information by asking supplementary questions
- Reviewed assignments, tests, and exams to provide relevant and constructive feedback to students
- Lead, taught, and marked weekly tutorials to ensure students fully understood the lecture material

Walmart Canada · **Cashier/Customer Service Representative** · June 2017 to Jan. 2019

- Scanned items, ensured that prices and quantities were correct, and collected payments
- Assisted customers by explaining or recommending items, answering questions, and processing exchanges and refunds
- Helped customers with complaints and questions, and gave customers information about products and services

American Eagle Outfitters · **Brand Ambassador** · May 2019 to Sept. 2019

- Acted as the face and voice of the company
- Built brand recognition, and successfully promoted product through engaging customers
- Increased the company's brand awareness and generated sales

PROJECTS

Binary input decoder: Maze Runner · 2020

Decodes integer values into binary and prints out serial combinations of multiple binary mazes to show path availability

- Used low memory intensive data structures to create and sort mazes
- Created an efficient algorithm to test which mazes will be able to run a path through themselves

Development Environment: C, Visual Studio, Virtual Box, Git, GitHub, Linux

Image editor for ghosting effect: Friendly Ghost · 2020

Image processor that lays a ghost image on a background image

- Used a recursive approach to manipulate RGB values to give the ghost image a translucent effect
- Imported and utilized the Pygame API which sped-up runtime
- Concentrated on image scalability

Development Environment: Python, Pygame, Visual Studio, Git, GitHub, Linux

Single-player game project: Flappy Bird · 2019

As part of a high school project – took initiative to recreate the classic mobile game Flappy Bird

- Used Object-Oriented Design, Encapsulation, and Polymorphism to create a maintainable code base, capturing functionality and interaction in multiple classes
- Documented design in UML class diagram, interaction diagrams for easier project maintainability
- Designed a custom Swing GUI based on static images read from disk to add a more enhanced visual experience
- Maintained persistent state by serializing to disk for faster project export

Development Environment: Java, IntelliJ, Git, GitHub, Windows