# **Gabriel Martell**

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#### **EDUCATION**

**Honours Bachelors of Computer Science,** Computer Game Development Stream **September 2020 - Present** 

Carleton University, Ottawa, ON

- Fourth-year standing, 10.00/12.00 GCPA (A-)
- Irene Gertrude Stitt Scholarship Fund (2021-2022)
- Expected Graduation April 2025

#### **AVAILABILITY**

Available for 4 - 12 months beginning September 1st, 2024.

### RELEVANT SKILLS, EXPERIENCES AND ACCOMPLISHMENTS

#### **Technical Skills**

- Developed a virtual library application in C, incorporating dynamic memory allocation and file manipulation for efficient book management, including check-in, check-out, and inventory functions.
- Created a community fridge website using JavaScript, CSS, and HTML, with functionalities for item checkout, donations, and real-time inventory updates using MongoDB, NodeJS, Express, and Postman for testing.
- Designed and implemented a virtual bookstore with Python and SQL, featuring a console window UI, robust database querying, and user functionalities such as adding/removing books from the shopping cart, storing payment information, and order tracking.
- Proficient in debugging techniques, adept at identifying and resolving logic and syntax errors encountered in tutorials and assessments.
- Skilled in application design and documentation, ensuring clear representation and explanation of implementation throughout assignments.

#### **Communication Skills**

- Collaborated with fellow counselors to deliver a variety of leadership-oriented workshops and events to high school students, demonstrating effective teamwork and communication.
- Recognized as a Cappies Critic for Canada's Capital Cappies, contributing analytical, respectful, and descriptive reviews of high school plays. Engaged in post-play meetings to share personal reflections and insights with fellow reviewers.
- Provided guidance to new students around campus, offering clear and concise introductions to key locations, classrooms, and faculty members, fostering a welcoming environment.
- Served as co-leader of the high school technical crew, collaborating with team members, assigning tasks, and effectively communicating with advisors and cues during performances.
- Proficient in reading, speaking, and writing English, facilitating effective communication in various contexts.

#### **APPLIED PROJECTS**

#### **COMP3005** Final Project Autograder

**January 2024 - March 2024** 

COMP3005: Database Management, Carleton University, Ottawa, Ontario

- Developed an automated grading system using Python and PostgreSQL to assess student assignments hosted on GitHub repositories.
- Implemented functionalities to clone student submissions, parse database dump files, and evaluate query performance, recording metrics for efficiency and execution times.
- Utilized CSV files for efficient storage and manipulation of query results and student data, facilitating easy access and calculation of final scores.

• Provided assistance and guidance to students regarding the submission process and troubleshooting queries.

Heartwave March 2023 - April 2023

COMP3004 Team Project, Carleton University, Ottawa, Ontario

- Engineered computer software for standalone heart monitoring devices using C++ with QtCreator, enabling users to measure, analyze, and visualize Heart Rate Variability (HRV) and coherence scores from heartbeat data.
- Orchestrated project planning and workflow allocation, ensuring seamless team collaboration and timely delivery of the final product.
- Produced comprehensive diagrams and documentation, including use cases, sequence diagrams, and UML representations, to accurately depict the software's functionalities and architecture.
- Enhanced the software's user interface to improve aesthetics, usability, and accessibility, resulting in a more polished and engaging user experience.

#### **WORK EXPERIENCE**

## **Application Engineer Intern**

**August 2024 - Present** 

RANOVUS Inc. Kanata, Ontario

- Installed and maintained optical fiber devices, ensuring proper integration and optimal performance across test setups.
- Developed and implemented testing and automation scripts to streamline data collection with various factors.
- Analyzed, recorded, and presented data insights to support decision-making and optimize device functionality and testing accuracy.

#### **Teaching Assistant**

Sep 2023 - Dec 2023, Jan 2024 - April 2024

Carleton University (COMP2402, COMP3005), Ottawa, Ontario

- Provided comprehensive support to students in understanding and guiding them through debugging and problem-solving processes to enhance their coding proficiency.
- Responsible for administering and troubleshooting class assignments, including testing and debugging the online submission server to ensure seamless functionality.
- Created an automated grader that clones GitHub repositories and determines runtime and determines correctness of SQL query scripts.

#### **VOLUNTEER EXPERIENCE/ EXTRA-CURRICULAR ACTIVITIES**

## **Leadership Camp Guidance Counselor**

September 2019

St. Francis Xavier Catholic High School, Ottawa, Ontario

• Organized and led a variety of leadership-focused events, workshops, and educational sessions, aimed at empowering students and fostering their leadership skills.

#### **Cappies Critic**

September 2019 - January 2020

The Cappies Inc. (Canada's Capital Cappies), Ottawa, Ontario

• Crafted detailed, constructive, and respectful reviews of performances by secondary schools' drama clubs, adhering to standards of clarity and positivity.