

Dylan Langlois

705-977-6917, dylanlanglois@cmail.carleton.ca, <https://www.linkedin.com/in/dylan-langlois-06576030b/>

Dear Interested Parties,

Thank you for taking an interest in my resume. As a second-year student pursuing a Bachelor of Computer Science (Honours), in a specialized stream in Machine Learning and Artificial Intelligence, with a minor in physics, I am eager to apply my knowledge and technical skills in a dynamic and collaborative environment—my proficiency in Java, Python, C/C++, and JavaScript, as well as my skills in software engineering and web development.

At Carleton University, I have gained hands-on experience through coursework in algorithms, data structures, web development, and personal projects. I am currently developing a database management system for advanced NHL statistics using Java, JavaScript, and MySQL, which involves designing a database and optimizing the software to ensure its scalability and efficiency. This project has deepened my understanding of building high-performance applications. Additionally, I developed a web application that dynamically formats and transposes music chords, as well as a chat web application where users can send messages to each other, enhancing my skills in JavaScript, full-stack development, and user interface design. These projects have sharpened my problem-solving abilities and reinforced my capacity to handle complex tasks and meet tight deadlines.

I am confident that my technical skills, enthusiasm for software engineering, collaborative mindset, and dedication to delivering high-quality solutions will allow me to make valuable contributions to your team. Thank you for taking the time to read my resume. I look forward to hearing from you to discuss how my skills can support you and your team's mission.

Sincerely,
Dylan Langlois

Dylan Langlois

705-977-6917, dylanlanglois@cmail.carleton.ca, <https://www.linkedin.com/in/dylan-langlois-06576030b/>

EDUCATION

Bachelor of Computer Science, Honours, Machine Learning and Artificial Intelligence, Co-op Option

September 2023 - Present

Carleton University, Ottawa, ON

- Second-year standing, 9.92/12.0 scale, (B+)
- Scholarships: Henry M Tory Scholarship.
- Expected Graduation Date: April 2028

AVAILABILITY

Available for 4 months beginning in May 2025

RELEVANT SKILLS, EXPERIENCES AND ACCOMPLISHMENTS

Technical Skills

- Designed and wrote advanced data structures in Java to handle operations in the fastest possible time.
- Built a website with the capability to load music chords from a text file and format it into a website with a user interface where the user can then transpose the song up or down.
- Optimized a program to use multi-threading to make a program that ran in approximately two minutes to mere seconds.
- Designed and wrote a story-based exploration game in Python.
- Developed and designed several programs that used object-oriented programming (OOP). These programs ranged from managing an E-store to simulations in both C++ and Java. These programs often used interfaces and several classes.

Communication Skills

- Collaborated with three team members in a golf course resort business simulation to delegate tasks and develop sections of the business to produce a profitable business.
- Collaborated with a lab partner to perform five separate labs, ensuring accurate data collection and analysis. Effectively communicated findings through structured lab reports, demonstrating teamwork and analytical skills.
- Collaborated with a partner to develop a software application, planning tasks, pair programming, debugging, integrating features, and communicating technical concepts, ensuring a strong development process and producing a high-quality product.
- Fluent in English: oral, written, and reading. This enables effective communication in diverse academic and professional environments.

WORK EXPERIENCE

- None.

APPLIED PROJECTS

Developer

December 2024-Present

NHL advanced statistics database managing software

- Developed using MySQL, data imported and managed using Java.
- Utilized object-oriented programming (OOP) principles to develop readable, efficient, and elegant code.
- Developed a system to automate importing large datasets, minimizing manual effort and improving accuracy.

Developer

September 2024-2025

Advanced data structure software

- Designed and implemented custom advanced data structures in Java to improve the performance of complex algorithms.
- Utilized object-oriented programming (OOP) principles to create reusable and scalable code, improving readability and reducing maintenance efforts.
- Optimized the efficiency of existing data structures, reducing time complexity for critical operations such as insertions, deletions, and lookups.

VOLUNTEER EXPERIENCE/ EXTRA-CURRICULAR ACTIVITIES

- None

RECORD OF GRADES

Dylan Langlois

Bachelor of Computer Science, Honours. Minor in Physics. 2nd year standing.
Machine Learning and Artificial Intelligence.

Carleton University

Cumulative Grade Point Average: 9.92/12 (B+)

Number of Academic (4 months) Terms Completed: 4

Co-op (4 Month) Work Terms Completed: 0

Graduation Date: April 2028

Course Number	Course Name	Letter Grade
Year One:		
COMP1405	Introduction to Computer Science I	A
COMP1406	Introduction to Computer Science II	A+
COMP1805	Discrete Structures	A-
MATH1007	Elementary Calculus I	A+
MATH1104	Linear Algebra for Engineering or Science	A
STAT2507	Introduction to Statistical Modeling I	B+
BUS1800	Introduction to Business	A-
CGSC1001	Mysteries of the Mind	C+
FILM1101	Introduction to Film Studies	B+
CRCJ1000	Introduction to Criminology and Criminal Justice	A
Year Two:		
COMP2401	Introduction to Systems Programming	A+
COMP2402	Abstract Data Types&Algorithms	A
COMP2404	Introduction to Software Engineering	In Progress
COMP2406	Fundamentals of Web Applications	In Progress
COMP2804	Discrete Structures II	In Progress
PHYS1007	Elementary University Physics I	B
PHYS1008	Elementary University Physics II	In Progress
PHYS1902	From our Star to the Cosmos	In Progress
STAT2605	Probability Models	B-