COLIN MCLAUGHLIN

(437)488-9893 | colinwmclaughlin@outlook.com | in linkedin.com/in/colinwmclaughlin | ○ github.com/colin-mclaughlin

EDUCATION

Queen's University   Expected Graduation Date: 04/2027
Bachelor of Computing, specialization in Artificial Intelligence   *GPA:* **3.63**

TECHNICAL EXPERIENCE

AI Developer - Natural Language Processing   September 2024 – April 2025
QMIND   *Queen's University*
- Analyzed, pre-processed, and visualized several large-scale electroencephalogram (EEG) datasets using Python libraries such as numpy, pandas, SciKitLearn, MatPlotLib, and seaborn to train machine learning models.
- Developed a Convolutional Neural Network model for EEG classification tasks – performed at a classification accuracy of over 95% for certain datasets.

AI Research Specialist   September 2023 – April 2025
Queen's Hyperloop Design Team (QHDT)   *Queen's University*
- Developed an algorithm to optimize a Hyperloop route network spanning across several provinces in Canada using geo-spatial software (QGIS) and associated python libraries.
- Contributed to proposals and research publication for Hyperloop Global in Toronto (May 2024) and European Hyperloop Week (EHW) in Switzerland (July 2024); QHDT AI received the full-scale Socio-Economic award at EHW.

"Capture the Flag" Competitor   September 2024 – April 2025
Queen's Cryptography & Cybersecurity Club   *Queen's University*
- Compete in weekly remote Capture The Flag (CTF) competitions across North America, participating in categories such as Web Exploitation, Cryptography, and Reverse Engineering.

WORK EXPERIENCE

Residence Don, Queen's University, Kingston, Ontario   August 2024 – April 2025

Computer Camp Counselor, Three-Flavours Kids' Club, Richmond Hill, Ontario   June 2024 – August 2024

Steward, Angus Glen Golf Club, Markham, Ontario   April 2022 – September 2022

PROJECTS

AI Communication Assistant | *JavaScript, HTML, CSS, Chrome Extensions API, Gmail API*   March 2025
- Developing a Chrome extension integrating Gmail API that enables AI-powered search and contextual message retrieval across emails.
- Expanding functionality to analyze message sentiment, generate email responses using OpenAI API, and integrate AI-powered contextual search across other platforms such as Outlook, Discord, and Slack.

Living Journal | *Python, JavaScript, HTML, CSS, Flask, React.js, OpenAI API*   January 2025
- Designed an AI Powered journaling assistant/interface for university hackathon (QHacks 2025).
- Implements OpenAI API to generate journaling prompts for users, based off of previous responses.

Analysis of Amazon Reviews | *Python, Pandas, Numpy, MatPlotLib, Seaborn, NLTK*   September 2024
- Used Python libraries to pre-process, load, visualize, and analyze sentiments from a database of Amazon Reviews.

SKILLS

Programming Languages: Python, Java, C, JavaScript, HTML/CSS, SQL, MATLAB
Frameworks & Libraries: React, Node.js, Flask, SciKitLearn, MatPlotLib, TensorFlow, numpy, pandas, seaborn
Tools & Platforms: Git, VS Code, IntelliJ, PyCharm, Eclipse, MS Office, Google Workspace

ACCOMPLISHMENTS, ACTIVITIES, AND CERTIFICATIONS

Project Lead at QMIND; researching the intersection of reinforcement learning and LLMs   Incoming September 2025
Professional Development Intern at Queen's Computing Students' Association   October 2023 – April 2024
Microsoft certified in Security, Identity, and Compliance Fundamentals   January 2025