

# Alexis Ng

Tech research analyst with a focus on emerging technologies and innovation to shape our future

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## Relevant Experience

### Bank of Montreal

Technology Research Analyst Mar '22 - Present

Software Developer May '21 – Mar '22

- Conducted in-depth research and analysis of trending emerging technologies such as Gen AI, 5G, metaverse and blockchain through banking use-cases and proof-of-concepts
- Collaborated with cross-functional teams including data analysts and data scientists to execute several automation tasks, including the development of employee onboarding personas, customer product selection, and payment optimization
- Developed and maintained a comprehensive financial report dashboard tracking the performance of Canada's top five banks on a quarterly basis, providing comparative insights such as average assets, total revenue, net income, and efficiency ratio
- Designed and implemented a personalized news aggregator website that utilized machine learning and large language model to curate customized news feed – highlighting skills in building and maintaining ETL pipelines

### Ministry of Transportation

Provincial Highways Management Engineering Associate May '19 – Aug '20

- Drafted electrical layouts, wiring diagrams, and completed lighting calculations of traffic and lighting systems on several provincial highways using AutoCAD
- Developed and strategized policy and standards development work related to highway lighting, traffic systems, accessible pedestrian signals and other transportation related electrical infrastructure
- Collaborated with engineers in the development of new innovative devices, installation, and maintenance of electrical systems

## Selected Projects

### alexiswhng.github.io

Personal website built using HTML, CSS, JavaScript, and Bootstrap 5

### Emerging Tech News web app

News aggregator web app built using Python Flask, HTML, CSS, and OpenAI

### Spotify Artist and Song Analyzer

Streamlit app that uses data visualization tools to analyze Spotify artists and their top songs. Created an alternative dashboard using PowerBI

## Skills

### Programming Languages

Python, SQL (Postgres, MySQL), HTML, CSS, JavaScript, MATLAB

### Libraries & Frameworks

Pandas, NumPy, Matplotlib, Beautiful Soup, Seaborn, Scikit-learn, Tensorflow, Keras, NLTK, Flask, Streamlit

### Tools & Platforms

Microsoft Suite (Word, Excel, PowerPoint, Visio, PowerBI), MySQL, AWS (S3, Lambda, Kendra, Quicksight, Athena), GitHub, AutoCAD

### Hard Skills & Techniques

Data visualization, Data pipelines, APIs, Extract, Transform, Load (ETL)

## Education

### Bachelor of Engineering, Electrical Engineering (Co-op)

McMaster University  
Hamilton, ON  
Sept 2016 – Apr 2021

## Certificates

### AWS Certified Cloud Practitioner

Issued by Amazon Web Services

## Interests

Running (training for the half-marathon), fitness, travelling, reading, karaokeing