# **Anthony Nguyen**

Master's Student in IT Engineering

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- Montreal, QC
- LinkedIn
- **GitHub**
- Portfolio

### **EDUCATION**

- Bachelor of Computer Science
  Concordia University
  - = 2021 2024 (Completed)
  - Montreal, QC

GPA: 3.57

#### Award:

- 2022-2023 Dean's List
- Master in IT Engineering
  École de technologie supérieure
  - 2024 2026 (Expected)
  - Montreal, QC

#### **SKILLS**

- SQL
- Python
- Java
- C++
- HTML/CSS
- React
- Javascript
- Git

#### **LANGUAGES**

- French
- English
- Vietnamese



# **INTERESTS**

- Jiu-Jitsu
- Bodybuilding
- Math & Physics

## **PROJECTS**

# E-commerce Web Application

- Extended an e-commerce website with new features, including a user recommendation system, dynamic pricing models, and stock management features using Java servlets.
- Designed and implemented a used products panel to display the most and least selling items.
- Redesigned the user interface to improve aesthetics and usability using HTML and CSS.
- Managed the full software development lifecycle, from requirements gathering and system design through implementation and testing.
- Authored a detailed project report that documented the development process, feature descriptions, and testing outcomes.
- Worked in a team of 5.

# Database Application for Monitoring Employee Health

- Developed a database application system that monitors employee health across different health facilities.
- Designed an Entity-Relationship diagram to illustrate the relationships between various entity sets critical to the application.
- Constructed a comprehensive database schema, detailing all relations and their functional dependencies.
- Implemented 3 triggers to ensure data integrity.
- Implemented and populated the database tables using SQL, followed by testing with 21 transactions and queries to validate system functionality and data integrity.
- Developed a fluid graphical user interface using PHP.
- Worked in a team of 4.

# CNN for EEG Signal Decoding

- Conducted comprehensive research on EEG decoding and brain-computer interface technologies.
- Designed and implemented a convolutional neural network using PyTorch, optimizing the architecture for EEG signal processing.
- Executed training and hyperparameter optimization, utilizing the Speech Brain MOABB library for benchmarking.
- Analyzed and compared performance metrics, documenting the model's effectiveness relative to state-of-the-art technologies.
- Authored a detailed project report, synthesizing research findings, methodologies, and performance analyses.

#### CNN for Facial Emotion Classification

- Sourced and augmented datasets of facial images labeled with emotions, including manual labeling to address data gaps.
- Implemented data visualization techniques to analyze class distribution and pixel intensity variations across the dataset.
- Developed and trained a convolutional neural network using PyTorch and Scikit-learn, employing k-fold cross-validation.
- Analyzed performance metrics and the confusion matrix to evaluate model accuracy, and conducted an analysis of bias to ensure fairness in model predictions
- Worked in a team of 3.