Ajun Jo

4th year Statistics & Computational Mathematics double major in University of Waterloo 905–651–5768 | joajune03@gmail.com | GitHub | LinkedIn

QUALIFICATIONS

Data Analytics: Python, SQL, R, NumPy, Pandas, Excel (pivots, lookups), Power BI in for data visualization, cleaning and analytics through projects and internships.

Programming: Four years of experience in Python, experienced in other languages; R, C, C++, and bash.

AI / Machine Learning: TensorFlow, PyTorch, AWS SageMaker, Google Colab.

EDUCATION

University of Waterloo

Waterloo, Ontario

Double major in Bachelor of Honours Statistics and Computational Mathematics / Minor in Computing Sep. 2021 – Sep. 2025

Relevant courses:

• Probability, Computational Statistics, OOP, Algorithm designs, Software Tools, Linear Algebra, Calculus **Awards**:

• University of Waterloo President's Scholarship

Activities:

- Computer Science, Data Science, Korean Christian Club (UW Ebenezer) Clubs
- Sports: Semi-comp league Basketball Intramural, beginner level soccer Intramural (Placed first in league)

EXPERIENCE

Machine Learning Engineer Intern

Etobicoke, Ontario | May 2024 - Aug. 2024

Vosyn

- Testing, training and resolving program bugs on TTS models, realigning output translations with video.
- Wrote a code script that runs denoiser through TTS output audio files that separates voice and background sound using UVR models through its API.
- Data *QA*, *preprocessing* and *pipelining* for TTS model training such as setting up input output streams, assuring metadata files, preparing sample datasets and revising necessary files for model input suitability.
- Fine-tuned XTTS-v2 model for Spanish and French, allowing it to transform texts into synthetic human voices by feeding datasets, modifying epochs, optimizer and split size corresponding to the size of datasets.

Private Math Tutor

Niagara Falls, Ontario | May 2022 - July 2022

Freelancing

- Professionalized communication and tutoring skills assisting student's high school math concepts.
- Provided clear and constructive feedback to the student during each tutorial session highlighting her strengths and the areas of improvement, resulting in over *twenty percent* rise in the student's mark in class.

PROJECTS

Dog Breed Image Classifier

June. 2024 – *July.* 2024

Project Summary: Convolutional Neural Network model that identifies different dog breeds based on their physical features.

- Pipelining data such as loading data, scaling pixels dimensions, defining train, validation and test datasets.
- Built and trained CNN model by adding layers, customizing batch size, optimizer and loss function.
- Evaluated model by plotting how losses and accuracy change over the increasing epochs.

TTS Model Denoiser (Vosyn)

June. 2024 – July 2024

Project Summary: A production level script that runs through .wav files separating voices and denoises background sounds.

- Used Python and PyTorch to use UVR models by using its API.
- The script was used in Voice Cloning products in my company, the output significantly increased the voice quality.

Chess (Group Final Project)

Nov. 2023 - Dec. 2023

Project Summary: An interactive chess game for humans and computer players of different levels of computer algorithms.

- Developed an interactive C++ OOP-based chess program, different game modes employing an observer pattern.
- Created computer algorithms that evaluate and predict future moves.
- Received a 94.2% project evaluation, gained in-depth understanding in compilers, I/O testing and design patterns.

Personal Finance Analysis

Oct. 2023 - Jan. 2024

Project Summary: An analysis that helped me to manage and gain an overview of my spendings.

- Used Python and Matplotlib to visualize my spending by using moving average.
 - Conducted data cleaning in csv files for clarification of the type of data.