Eric Chen

514-991-8582 | eric.hanyang.chen@gmail.com | https://www.linkedin.com/in/eric-chen-016876167/ |
https://github.com/EricToCode https://erictocode.github.io/

EDUCATION

McGill University September 2020 – May 2023
B.Sc. - Honours in Physics and Computer Science *Montreal, QC*

- Relevant Courses: Algorithms & Data Structures, Operating Systems, Computer Systems, Software Design, COMP 500 Applied Machine Learning, Numerical Computing, Web Development, Digital Electronics
- GPA: 3.5; Graduated with first-class Honours distinction

EXPERIENCE

Bell Canada May 2023 – Present
Data Science Intern *Montreal, QC*

- Implemented real-time logging software using the **Elastic stack** tools that documents abnormal on-field agent actions, enabling faster and more accurate flagging of system or human errors in the order fulfillment pipeline
- Created 2 new data source pipelines using the **Logstash** pipeline tool, providing over **30 million additional monthly** on-field agent interaction data points for the data analysis/machine learning team
- Migrated 3 relational databases into an **Elasticsearch** cluster, improving large query performance by **10x**
- Implemented a machine learning model using a **Python large language model** to analyze error reports, providing **15%** more accurate system error detection tested on historical data
- Implemented a new automated "suggested next-steps" feature for on-field agents, able to **predict up to 100%** of the required steps to fix a reported error

Bell Canada May 2022 – August 2022
Software Developer Intern *Montreal, QC*

- Led creation of GUI app for setting up automated stress tests, allowing modem testing team to easily set up multi-day stress tests with automated reports; main tools used: **Python, SQL, Ruby**
- **Leadership position**: Co-led Bell community change iOS and Android Home council; communicated with product owners to consult about upcoming iOS/Android releases, preparing affected teams to adopt new features at launch such as Passkeys and Live Activities on iOS
- Onboarded new brands of smartphones for automated testing, increasing fleet size by 33%, by adapting the **Ruby** code in the **Devium** automated testing software

TECHNICAL SKILLS

Languages: Python, JavaScript, C, Java, SQL, HTML/CSS
Frameworks/Libraries: React, React Native, Node.js, ELK stack, MongoDB, Django, PyTorch, TensorFlow, NumPy, Pandas, MatPlotLib
Tools: Docker/Docker-compose, Git, MySQL, Confluence, Jira, Arduino

PROJECTS

MusicMoodAI - Undergraduate Researcher (Click here to view project report) Spring 2023

- Undergraduate research: Machine learning project implementing Neural Networks to create more personal music recommendation by utilizing the new features in the **Spotify API**
- Connected input data from the Spotify API, pre-processed with Python/Pandas and the Spotipy library, to machine learning models that were built with **Tensorflow**
- The Neural Networks were optimized for the Thayer model of music to mood relationship
- Implemented lyrics analysis using a large language model

3D Print marketplace (MERN stack) 2023-2024

- Online marketplace connecting 3D printed project creators, manufacturers and buyers at the same site
- Free 3D printing project files sharing
- Modern look with fast backend built with express.js and mongodb
- Scalable business with low commission fees on sales