

VIVIEN CHOW

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EDUCATION

École de Technologie Supérieure | BS Software Engineering (GPA: 3.54)

Expected Jun. 2021

EXPERIENCE

Computer Vision and Machine Learning Intern

09/2019 – 12/2019

Genetec | Montreal, Canada

- Succeeded in optimizing the existing people detector and a vehicle classifier that resulted with improved frames per second and mean accuracy precision.
- Researched and applied image processing techniques, metalearning, computer vision algorithms and new machine learning frameworks within proof of concept.
- Set benchmark system to compare results of different experiments on CPU using OpenVino.

Software Developer Intern

09/2018 – 12/2018

Caisse de dépôt et placement du Québec | Montreal, Canada

- Programmed in C# and other languages in the Application Solutions for Private Equity Funds team.
- Implemented automated tests with Azure DevOps according to the strategy prepared by the software designer assigned to the team.
- Integrated Single Sign-On for Automation of CA Workload Automation.

PROJECTS

SafeTrained Android App | Bachelor of Science in Computer Science

- Being aware of the ongoing staffing and time constraints during the Covid19 pandemic, I collaborated with McGill health students to develop an Android app which would enhance learning for assistants of the orderlies and new hires of long-term care facilities.
- Programmed in Kotlin with Android Studio, following best practices allowing data persistence and easy updates.
- Multiple functionalities are included such as bilingual option, quiz, checklist, glossary and information modules.

Cloud Punch! (ImplementAI Hackathon)

- Developed an app which applies Open Pose to simultaneously track the movements of two players, from two separate video feeds who can physically interact in a virtual space and play a boxing game, even if they are in separate locations.
- Local clients use Flask to broadcast each player's video feeds on the local area network via a multi-threaded video capture class. Pose estimation server hosted on Google Colab estimating joint landmark vector for each player via a modified OpenPose model.

Social Network Website

- Full stack social network application deployed on Heroku using Node.js, Express, React, Redux and MongoDB along with ES6+. Also include Express Stateless JWT authentication React Hooks and tested with Redux Chrome extension. Allows users to sign up, create profile, comment, like and post

Dr Plant Android App

- Developed Android app using Android Studio and Java which allows a user to upload an image from camera or gallery and detect the plant disease. Used Microsoft Azure CustomVision to train convolutional neural network.

SKILLS

Programming Languages: C#, C++, Java, JavaScript, Kotlin, Python, SQL

Utilities: Git, Docker, Kubernetes, Android Studio

Web: React, NodeJs, MongoDB, Redux, Angular, Flask

AI/ML: Pytorch, Tensorflow, Matlab, OpenCV, Hadoop, Spark

EXTRACURRICULAR ACTIVITIES

Délégation des compétitions en informatique de l'ÉTS

Member of the university's competitive delegation and participated in multiple hackathons such as CSGames, CoveoBlitz, ImplementAI, JDIS, HackFest, LHGames (2nd Place)

INTERESTS

Hackathons | Beach Volleyball | Rock Climbing | Baking | Piano | Video Games