

ZISHENG YE

+1 438-927-8618 | zisheng.ye@mail.mcgill.ca | <https://www.macaoleaf.com>

EDUCATION

McGill University

Sept 2016 - Present (Dec 2020)

- Bachelor of Science, Major in Statistics and Computer Science, Minor in Mathematics (*Full Courses Link*)
- High level courses: Artificial Intelligence, Machine Learning, Data Science*, Computer Vision, Natural Language Processing, Computational Linguistics, Stochastic Process, Time Series, Game Theory*, Convex Optimization, Discrete Optimization, Linear Optimization*, Non-parametric Statistics* (*: currently taking)
- Exchange student in *The Chinese University of Hong Kong* in Winter 2019 (Jan - May)
- Raised Funding 1500 CAD for selected students studying abroad
- Final Year GPA: 3.75/4.00

EXPERIENCE

Researcher

Jun 2018 - Present

Cooperation with Prof. Boyu Wang, Western University

- Research about decoding in EEG-based Brain-Computer Interface using deep learning and applying transfer learning framework onto certain SOTA networks in CV (2018-2019)
- Research about application of differential privacy in machine learning and transfer learning framework (2020)

Research Assistant

Jan 2019 - May 2019

Under Prof. Jimmy Lee's Supervision, The Chinese University of Hong Kong

- Research on project - *Detecting Similarities of Computer Programs in Generalized Languages*
- Aimed at studying current SOTA techniques in detecting similarities of computer programs; Adapted and adopted suitable techniques for detecting similarities in programs in a text-based form; Proposed novel methods in similarity measurement of vectors; Made an oral defense.

Machine Learning Algorithm Engineer

Jun 2018 - Aug 2018

Supervisor: Dr. Jinfeng Yi, Machine Learning Lab, JD.com AI Research, Beijing & Nanjing

- Took charge of an automatic customer service project in its second phase, discovered a better classification strategy using data mining technique, improved the theoretical performance by 50% with slight compromise
- Designed and realized the advertising system in no-salesman stores using cameras to classify potential customers, and then applying strategies to display corresponding goods onto the advertising screens
- Designed an importance weighting mechanism in certain sorting algorithms to reduce time complexity

PROJECTS

AI Player for Game Saboteur

Jan 2020 - May 2020

Designed and implemented an AI player for a non-deterministic board game called Saboteur using Breadth-First Search and A* Search; Decision tree pruned by human's experience; Ranked top 20% among all competitors; Written report with distinction.

Identity Finder

Nov 2018

Aimed at helping find the children that lost in their early ages; Created and trained a CNN in PyTorch to measure the similarities between profiles in people's different ages; Made a UI in PyQt for users to upload paired pictures as inputs to the trained model; Test case precision 90%+.

Lambda Calculus Interpreter of an XML-style Language

Jan 2018 - May 2018

Implemented an interpreter that can parse, *pretty-print* and evaluate a made-up XML-style language with certain grammars provided by the instructor; Lambda calculus feature added.

SKILLS AND INTERESTS

- **Technical:** Python, Java, C/C++, MATLAB, R, Scala, SQL/MongoDB, Scripts(Bash, Batch), Git, L^AT_EX
- **Certifications:** Deep Learning Specialization (deeplearning.ai), Classical Music (Yale)
- **Languages:** Mandarin (Native), Cantonese (Fluent), English (Fluent), French (Beginner)
- **Sports:** Table Tennis (University Varsity Team), ESports (Music Game, National Team, World Cup participant)
- **Voluntary Work:** Personal Startup Developer (CV algorithm design, data analysis and technical support), Music Game Developer (UI and algorithm design), Peer Tutor Program (Maths & Stats Department, McGill)