

ZHUOYUE LYU

(647)685-4909 | zhuoyue.lyu@mail.utoronto.ca ZhuoyueLyu.github.io



Sep 2017 - Jun 2021

Toronto, Canada

EDUCATION

University of Toronto (St. George)

Computer Science Specialist - Focus in Artificial Intelligence

Major GPA: **3.84** / **4.00**

- A+ CSC165 Math Expression & Reasoning
- A+ CSC236 Intro to Theory of Computation
- A+ CSC258 Computer Organization (Hardware & FPGA)
- A+ CSC384 Intro to AI (Bayesian Networks, HMM...)
- A CSC207 Software Design (OOP, Testing, MVC)
- (Currently) CSC311 Machine Learning
- (Currently) CSC413 Neural Net & Deep Learning

WORK EXPERIENCE

DGP Lab, University of Toronto

Research Assistant, Department of Computer Science

Jul 2019 - Present Toronto, Canada

- Working with Prof. Tovi Grossman on the VR project, aiming for publishing on IEEE VR conference
- Conducting the user studies with 24 participants, data cleaning and analyzing using Anova.
- 3D model building and printing for hand & VR controller connecting

IAI Lab, University of Toronto

Mar 2019 - Jul 2019

Research Assistant, Department of Computer Science

Toronto, Canada

- Working with Prof. Joseph Jay Williams on the Goodlife project which used the RL
 algorithm to provide personalized text messages that encourage people going to the gym
 more often
- Progsnap project, responsible for transforming the PCRS data to the Progsnap 2 format

Chinese Academy of Sciences

Aug 2018 - Sep 2018

Research Intern , Autonomous Vehicle team, Institute of Software

Beijing, China

- Generated 11,600 deteriorated images of street signs
- Using TensorFlow to retrain the last layer of Google Inception V3 neural network
- By tuning the hyperparameter of the ML model, got a classifier with 90%+ precision
- Analyzed the data and probed the relationship between deterioration rate and identifying accuracy

SKILLS/PROJECTS

Language: Python, Java, Verilog, C, C#, LaTex, VB, CSS/HTML

Tools: SQL database, GitHub, Linux/Unix, TensorFlow, Android Studio, Unity, Quartus



Android Game Centre (click)

- Developed three separate Android games for Google Pixel 2.
- Used SQL database and design patterns like MVC, Iterator and Observer.
- Designed the UI, wrote test cases for validation.

Stonehenge/SubtractSquare Game (click)

Using OOP techniques from the Python course with iterative/recursive/minimax AI strategies.

Machine Learning Models (click)

Creating 5 machine learning modes (like KNN, decision tree) follow the online learning source

Personal Website (click)

Self-taught and designed using HTML

LEADERSHIP EXPERIENCE

AIESEC Poland

May 2018 - Jun 2018

Global Volunteer, Quality Education

Katowice, Poland

- Led a team of 11, presented Chinese culture during the "Global Village" activity in Katowice
- Conducted culture-sharing lessons for 6 weeks, with 600+ students from 2 schools, ranging from kindergarten to grade 11 in Bielsko-Biała and Dobieszowice
- Arranged Chinese papercutting/songs singing with 36 students who had mental disabilities

MISCELLANEOUS

- 1st place in "就要大声说" 2017 UofT Chinese Speech Contest (Nov 2017)
- 2nd prize in Chinese Mathematical Olympiad, Zhejiang Province (Mar 2016)
- Outstanding Student (优秀共青团员) of Zhejiang Province (Jun 2015)
- President of the Hangzhou City Arts Festival Student Organizing Committee(2014)
- National Singing Certificate, level 5; Saxophone/Piano Certificate, level 2