

CHIHENG LI

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EDUCATION

University of Toronto

2017 - Present

Candidate of Computer Science Specialist, Statistics Minor, Web Development and AI Focuses

U of T Entrance Scholarship **\$7500** with **95+** admission average, CGPA: **3.67/4.0**, MGPA **4.0/4.0**

Coursework: Introduction To Machine Learning, Introduction to Database, Operating Systems, Algorithm Design, Computer Network, Software Design, Computer Organization, Probability and Statistics, **Data Structures and Analysis (90%)**, Introduction to Theory of Computation, **Software Tools and System Programming (90%)**

TECHNICAL SKILLS

Web Development	Javascript , CSS3, HTML5, React , Bootstrap, Bulma, Node.js, Golang , PHP
Database	MongoDB, PostgreSQL, and MySQL
Google Cloud Platform	Firebase Authentication, Firebase Storage, Firebase Realtime Database
AWS	AWS Amplify, AWS EC2, Route53, and Lambda
Data Analysis	Scikit-learn, spaCy, NumPy, Python , Anaconda, C , and Jupyter Notebook
Android	Java , LIBGDX, Android SDK, Mockito, Dagger, and Mocha

PROJECTS

Machine Learning Projects

Nov 2019

link: <https://github.com/lichiheng1998/ML-courseworks>

- Trained **deep neural network** to classify the emotion from **16 × 16** pixels images and achieved **76.6%** average
- Applied the **PCA** algorithm to **reduce the dimension** of handwritten digit images from **600** to **30**, classified the testing images using **the nearest neighbor** algorithm and achieved a final score of **99%** correct prediction
- Extract **TF-IDF vectors** from word corpus, filtered fake news using **decision tree classifier**, got **76%** hit ratio

Chihengli.me

June 2019

link: <https://github.com/lichiheng1998/MyPortfolio>

- Wrote **REST API** endpoints with **goroutines** to access **MongoDB Atlas** server for blog posting and editing
- Designed and fulfilled the **animated** UI using **Bulma CSS library** and **Virtual DOM** provided by **ReactJS**
- Crafted mobile-first and responsive app with **media queries**, improved user experience on different sized devices
- Enhanced the security of private APIs with token-based **authentication** and **authorization** using **Auth0** Server
- Raised the performance and cost ratio with deployment to **AWS Amplify** and **EC2** Cloud Computing Platforms

Android Game Box App

Nov 2018

link: <https://github.com/lichiheng1998/GameCenter>

- Structured the project in **Model-View-Presenter architecture** to separate the concerns in presentation logic
- Implemented authentication, authorization, and data synchronization serverlessly with **Google Cloud Platform**
- Engineered the code base with the benefits of **design patterns** including factory, dependency injection, and Iterator patterns. Strictly followed the **SOLID** principle to ensure the maintainability and scalability of the App
- Performed **unit testings** and **integration testings** following the **AAA practice** with **Mockito** and **Mocha**

EXTRA-CURRICULAR

Hack the Valley3

Feb 22nd – Feb24th 2019

- Learned, designed and built demo which helps people locate missing items with **ARKit** library within **48 hours**

Certificates of Course Completion in Udemy

July 1st – Sept10th 2019

1. **JavaScript**: Understanding the Weird Parts
2. **NLP**: Natural Language Processing with Python