

# CHIHENG LI

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297 College Street, Toronto, Ontario, M5T 1S2



## EDUCATION

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### 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, Advanced Calculus, Introduction to Theory of Computation, Software Tools and System Programming

## TECHNICAL SKILLS

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

## PROJECTS

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### Chihengli.me

June 2019

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

- 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

### NLP-Pronunciation-Evaluation-Engine

Winter 2019 - present

link: <https://github.com/lichiheng1998/NLP-Pronunciation-Evaluation-Engine>

- Used **NLP/ML** algorithms and statistical models to evaluate the authentic intelligibility of English pronunciation
- Derived insertion, substitution, and deletion scores of recordings with **Pocketsphinx**'s phoneme alignment APIs
- Trained a  $4 \times 32$  scale **DNN** that mapped input features to class probabilities with **Softmax** activation function

### 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

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### Hack the Valley3

Feb 22<sup>nd</sup> – Feb 24<sup>th</sup> 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 1<sup>st</sup> – Sept 10<sup>th</sup> 2019

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