# Yanwen LIN

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#### **Education Background**

# **Dalian University of Technology**

Sep.2013-Jun.2017

Bachelor of Engineering in Civil Engineering

• GPA: 3.84/4.00

### **Carnegie Mellon University**

Aug.2017-Present

Master of Science in Civil and Environmental Engineering

• Current GPA: 3.83/4.00

# Research Experience

# Virtual Tracking Experimental System Based on Unity3D

**Dalian University of Technology** 

Supervised by Prof. Yuhua Li

Oct.2014-Apr.2015

- Aimed to develop a virtual tracking experimental system programmed by C# in Unity3D
- Designed 3D modeling of experimental apparatus
- Awarded the first prize in the 10th Traffic Science and Technology Competition in DUT

### Course Project

# Web Scraping via REST API and HTML of Yelp

Carnegie Mellon University

Course: 15-688 Practical Data Science

Jan.2018

- Queried restaurants information using Yelp API key, including reviewers, rate, score, review text, etc.
- Used python (BeautifulSoup package) to scrap HTML of Yelp source page to get useful restaurants information.

# **Applied Machine Learning for Gene Expression Profile Classification**

Carnegie Mellon University

Course: 10-701 Introduction to Machine Learning (PhD level)

Nov.2017-Dec.2017

- Performed dimensionality reduction on cell gene expression profile data using PCA/kernel PCA, LDA, etc.
- Predicted the types of certain cells using the reduced-dimension version of their gene expression profiles. Methods Including: logistic regression, SVM, neural network, random forest, etc.
- Combined results from each kind of methods based on their accuracy score as weight and use cross-validation to achieve best performance.

#### **Data Mining for Vehicle Transaction**

Carnegie Mellon University

Nov.2017-Dec.2017

Course: 12-741 Data Management

- Employed SQL to read and query vehicle transaction data from Department of Transportation
- Decomposed raw data base via BCNF based on functional dependencies.
- Applied multivariate linear regression, decision tree, naïve bayes to predict new price using old car information.

## **Internship Experience**

# China International Engineering Design & Consult Co., LTD

Beijing, China

Project title: Jingdong Langfang project

Jul.2016-Aug.2016

- Made effort in the architectural design of Jingdong Langfang project
- Discussed structural design in group meeting about reinforcement layout scheme of main building and provided many calculation and calibration results for reference

#### Skills

• **Technical skill**: Machine learning, data mining, Bayesian inference, database management, web scraping, xml/html parsing, team work

- **Programming language**: Python, Java, SQL, HTML, Javascript, C/C++, C#, Latex
- Application software: MATLAB, AutoCAD, Autodesk Inventor