

# Weining Hu

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## Education

**University of British Columbia**

**2016-present**

- MSc in Statistics

**University of British Columbia**

**2013-2016**

- BSc in Computer Science combined with Statistics

GPA 3.95/4.33

## Awards

ACM-ICPC Pacific Northwest Regional D2 Bronze Medal (2015)

## Work Experience

**Software Engineer Intern at Amazon**

**June, 2016 – Aug, 2016**

- Project topic: Dynamic Content Management System
- I worked at AWS Console Team to build infrastructure tools to enable content owners such as Product Managers to modify the client side UI based on well-defined view based JSON responses without code deployment.
- The work I did include:  
Content Pipeline: Extracted JSON files containing content data from AWS S3 and utilized the data into final UI widgets.  
Internal Content Management System: Built for PMs to enable modifications of contents and uploading the new content to AWS S3.

**Research Assistant at Department of Statistics at UBC**

**Oct, 2014 – Sep, 2015**

- Research topic: Mixed Effect Model for Complex Data
- I worked on dataset coming from BC Cancer Agency of lung cancer patients where longitudinal data along with other infos are recorded. We intend to find pattern that lead to further cancer development.
- The work I did include:  
Process data for Analysis: This includes data cleaning to properly handle different units, missing entries as well as data reconstruction.  
Exploratory Data Analysis: Extract insights from dataset by data visualization and conducting both parametric and nonparametric tests, do some preliminary linear regression and diagnostic;  
Perform In-depth Analysis: Apply mixed effect model that introduced random effects and make individual specific inference.
- Github: <https://github.com/weininghu1012/MixedEffectModel>

## Technical Projects

**WomenInSTEM: Data Visualization Project**

**July 2015**

- Created this interactive data visualization web page based on Tracy Chou's public dataset
- Build data pipeline in R and then apply GoogleVis package to make charts of different kinds

- Embed the code into html and turn the plots visible
- Link: [weininghu1012.github.io/wis.html](https://weininghu1012.github.io/wis.html)

### **Animanga: Web Application**

**Jun 2015**

- Created a PHP web application that allows user to search for information about manga and anime
- Utilized MySQL to build a local database that stores data
- Embedded SQL command in PHP code to allow users search for contents with different need
- Designed user interface with Twitter Bootstrap, CSS, Html
- Worked in team of four that goes through a agile development cycle
- Using Python package Scrapy to get real manga data from website and load in database
- Add security methods (salted password hashing) for storing user's personal data
- Github: <https://github.com/weininghu1012/Animanga>

### **BikeSharingDemand:Kaggle Competition**

**Jan 2015-Apr 2015**

- Built a regression model in R using random forest method for predicting future bike sharing demand given data with high dimensional features
- Improving the accuracy via feature engineering, data visualization that extracts the most important predictors
- Continually modifying code by integrating new machine learning methods such as boosting, clustering
- Github: <https://github.com/weininghu1012/BikeSharingDemand>

### **VanStreetFood: Web Application**

**Sep 2014-Dec 2014**

- Created a Python web application that stores and displays the data of vendors in Vancouver and provide search and comment utilities for users
- Integrated the website with social network (Facebook) using Facebook API and users could either log into our website with Facebook account or website account
- Design user interface with Twitter Bootstrap, CSS, JavaScript
- Worked in team of four that goes through a agile development cycle

### **NextBus: Android Application**

**Mar 2014-Apr 2014**

- Created an Android application that uses live bus information to allow users create favorite list of selected bus stop and plot bus locations serving that stop
- Parsed data in JSON format from Translink API about bus stop, route
- Used Android SDK with Android emulator to allow users interact with the interface including click, zoom in/out
- Achieving all the targeted requirements through Junit tests and debugging process in a team of two.

## **Skills**

Languages: Python, R, Java, PHP, SQL,