

## Summary

Mr. Zhang is now working as a Data Analyst in Net Esolutions. Highly motivated and passionate, with creative thinking and extensive experience in data analysis and data mining using variety of analytical packages and skills, he is looking for a position in the fields of data analysis and data science.

## Work Experience

- **NET Esolutions Corporation** **Data Analyst** **July 2014 – Now**
  - SQL query from database and run analytic reports.
  - Data cleansing and data transformation in SQL database.
  - Data analytics and data visualization using Python.
  - Front end web development using AngularJS.
  - D3 and Tableau visualization.
  - Python for machine learning.
- **FINCA International** **Data Analyst** **March 2014 – May 2014**
  - Analyzing country specific survey data to report on the poverty profiles of FINCA clients.
  - Constructing a country specific poverty screening tool to be used to measure FINCA's poverty outreach.
- **Friends of Choice in Urban Schools (FOCUS DC)** **Data Analyst** **September 2013-March 2014**
  - Training and supporting teachers in using data systems to conduct analyses.
  - Supporting data managers in preparation and cleaning of data in order to integrate with the main data system.
  - Designing student dashboards for use by staff, including in parent-teacher conferences.
- **DC Power Supply, LLC** **Data Consultant** **April 2013-August 2013**
  - Metrics design and calculation based on post transaction historical data.
  - Hypothesis testing application for different customer groups.
  - Customer retention analysis, prediction of customer lifetime value, and churn analysis using data mining.

## Education

- **GEORGE WASHINGTON UNIVERSITY, WASHINGTON, DC** **September 2012-May 2014**  
Master of Science, Statistics GPA: 3.81/4.0
- **UNIVERSITY OF CINCINNATI, CINCINNATI, OH** **September 2009-January 2012**  
Master of Science, Structural Engineering GPA: 3.20/4.0
- **UNIVERSITY OF SCIENCE AND TECHNOLOGY BEIJING, CHINA** **September 2005-June 2009**  
Bachelor of Engineering, Civil Engineering GPA: 3.50/4.0

## Courses

- Mathematical Statistics, Applied Linear Regression Analysis, Applied Multivariate Analysis.
- Data Mining, Data Analysis, SAS Program-Data Management.
- Experimental Design, Computational Statistics, Clinical Trials.
- Investment Analysis Portfolio Management, Database Management Systems.

## Courses from Coursera and Udacity

- Algorithms: Design and Analysis, An Introduction to Interactive Programming in Python.
- Machine Learning (Andrew Ng), Mining Massive Datasets (on going).
- Introduction to Data Science, Intro to Hadoop and MapReduce, Introduction to Big Data with Apache Spark

## Projects

- **Computational Statistics Project with R- Traveling Salesman Problem Using Simulated Annealing**
  - Use the original sequence for the first trial and calculate the distance between each neighbor cities, add them up for the total distance.
  - Choose two cities randomly and swap the order. Use this new sequence to calculate the new total distance.
  - Randomly decide to accept or reject this new sequence.
  - Repeat above steps and refresh the temperature until it decreases to 0.
- **Data Mining Project with R- Credit Scoring Algorithms Improvement**
  - Determine the project objective based on the purpose understanding and business interests.
  - Perform data mining algorithms using clustering, classification, segmentation, and prediction.
  - Report evaluation of the project including analysis and assimilation, finally optimize credit scoring algorithms.
- **Machine Learning with Apache Spark- Predicting Bike Sharing System**
  - Extracting the right features from the bike sharing dataset.
  - Training and using regression models.
  - Evaluating the performance of regression models.
  - Improving model performance and tuning parameters.
- **Machine Learning with Apache Spark- Predicting Movie Ratings**
  - Preliminaries: Read two files of ratings dataset and movies dataset and data preparation.
  - Basic Recommendations: Filter and find movies with high ratings and more than a certain number of reviews.
  - Collaborative Filtering: Use MLlib to apply collaborative filtering.
  - Predictions for Yourself: Predict what movies to recommend to people, for example, yourself.

## Activities and Rewards

- 2013-2014 Golden Key Membership at George Washington University.
- 2009-2012 awarded University Graduate Scholarship by University of Cincinnati.
- 2006-2009 awarded People's Scholarship for academic achievements.
- 2006-2009 awarded the "All-Star Student" for four years consecutively.

## Skills

- |              |             |                         |
|--------------|-------------|-------------------------|
| • Python     | • R         | • Apache Spark (Python) |
| • JavaScript | • D3.js     | • SAS                   |
| • MySQL      | • MongoDB   | • Matlab                |
| • SPSS       | • AngularJS | • Tableau               |

## Certificates

- SAS Global Base Programming.
- SAS Global Advanced Programming.
- MIT Certificate for Tackling the Challenges of Big Data.
- edX Verified Certificate for Introduction to Big Data with Apache Spark.
- MongoDB University M102: MongoDB for DBAs.
- Intro to Python for Data Science from DataCamp.

## Work Authorization

- Authorized to work with H1-B for any E-verified employer.