# Keying (Kevin) Li

(917)-573-5828 | 246 W 108th Street 1E, New York, NY, 10025 keying.li@columbia.edu | www.linkedin.com/in/keyingli

# **EDUCATION**

## Columbia University, School of Engineering and Applied Science

M.S. in Computer Science, Machine Learning, 3.6/4.0

Expected Dec.2016

Beijing University of Posts and Telecoms (BUPT), School of Information and Communication Engineering B.Eng. in Communication Engineering, 89.95/100, Top 10%

July.2015

#### **SKILLS**

Languages Java, JavaScript, Python, C, Matlab, HTML/CSS, SQL, IATeX

Software and Tools UNIX/Linux, Google Cloud Platform, AWS, Git, Sckit-learn, VIM, OPNET

Web Development Angular 2, NodeJS, d3js, GoJS, Django, Flask, Bootstrap, LAMP

## WORK EXPERIENCE

## Schlumberger

June.2016 - August.2016

Full Stack Software Intern, Omega Transformation Team

Houston, TX

New York, NY

- Worked with geophysicists, data scientists, and engineers to build cloud based, seismic data analytics products.
- Built a NodeJS-Angular2 web app, hosted on Google AppEngine, to provide geophysicists with analytic results, data visualization and recommendation on designing seismic processing job flows. Used Angular 2, TypeScript, GoJS, d3js, ExpressJS, Google Cloud: AppEngine, BigQuery, GCS.
- Carried out data processing and analytics in Python on a dataset of 6 million seismic jobs from 48 Houston projects. Techniques: TF-IDF to find important modules, Hierarchical Clustering on graph representation of jobs, etc.
- Improved performance and cost saving of the web app by implementing an asynchronous data caching using GCS

Columbia Law School

January.2016 - June.2016

Software Intern

- Designed and realized a new automated approach in Python to download documents from a public website, while effectively avoid getting blocked by the server. This approach is two times faster than the old one, and more robust.
- Determined what tools to use after experimenting with Selenium WebDriver, PhantomJS, Tor, Fake User Agent.
- Executed downloading using AWS EC2, performed troubleshooting and improved performance through trial and error.

# **PROJECTS**

# Large Scale Dynamic Events Analysis using Multimedia Big Data

Mar.2016 - June.2016

Research Project@Digital Video and Multimedia Lab, Columbia, Web Developer

New York, NY

- This project used traffic cam videos, WAZE reports and Twitter tweets to power a web app, that helps users easily navigate 'where', 'when', and 'what' is happening in the NYC and observe those events in a data driven fashion.
- Designed and implemented the UI. Built a map based data visualization and a image-video player with playback functionality using Leaflet.js and d3js.
- Set up Flask framework backend, which serves the web app and interacts with the PostgreSQL database using Psycopg2.

## Music Auto-tagging using Supervised Machine Learning

Feb.2015 - July. 2015

Music Auto-tagging System based on Audio Feature Learning, Independent Project

Beijing, China

- Researched on audio & music information retrieval and machine learning theories for multi-label classification.
- Collected labeled music data of 1200 songs, and realized feature extraction of FFT and MFCC feature.
- Designed and realized Music Auto-tagging System independently based on learning models: K-means, logistic regression, kNN, and SVM. Achieving accuracy of 89.7% on major tags.

#### File Recovery From Shredded File Images

Aug.2013

Hackathon: Mathematical Modeling, Project Leader

Beijing, China

- Designed and implemented algorithms: A Sobel operator and Gray Scale based matching algorithm for Chinese file; A Word-Baseline Fitting model for English file.
- Awarded second prize for being able to recover files of one-sided or double-sided, in either language.

## LEADERSHIP EXPERIENCE & ATHLETICS

Assistant Manager, University's Track and Field Team, BUPT

Team Captain, School's Basketball Team, BUPT

4th Place in High Jump, Beijing Universities' Track and Field Tournament, Beijing

Vice President, University's Basketball Association, BUPT

Sept.2013 - July.2015

Sept.2013 - July.2015

Sept.2013 - July.2015