

# Minghua Jiang

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## Objective

Seeking a Software Development Intern position for Summer 2017.

## Education

**University of Virginia** *Charlottesville, VA* 3.93/4.0 Dec 2017

Master of Computer Science

Relevant Coursework: Design and Analysis of Algorithms • Cloud Computing • Information Retrieval  
Computational Visual Recognition • Natural Language Processing • Machine Learning

**Fudan University** *Shanghai, China* 3.08/4.0 Jul 2010

Bachelor of Engineering in Software Engineering (Fudan & University College Dublin Joint Program)

## Work Experience

**Citigroup, Shanghai, China** Jul 2010 - Aug 2016

*Assistant Vice President (Java Team Leader)*

- RCAST CCAR Reporting - A centralized Citi risk regulatory reporting platform for CCAR stress testing. (E-Core, SparkJava, Spring, Hibernate, Oracle, EHCache, JDK 8, Google Guice, Google Guava)
- Developed the UI based on internal web framework named E-core to write front-end pages using Java.
- Built an eclipse plugin to enable drag and drop components for quicker page lay-out design.
- Researched and introduced Google Protobuf as message payload between client and server.
- Implemented HTTP server side architecture using Command Pattern based on Jetty.
- Redesigned the architecture using SparkJava as an embedded-jetty framework to populate restful web services.
- Developed the ETL framework and data query API based on EHCache.
- Set up TeamCity, Jenkins and Sonar for project quality assurance.
- Introduced distributed test-case run for TeamCity pre check-in build jobs to shorten the running time of test cases.

## Project Experience

**Twitter Sentiment Analysis** - <https://github.com/MinghuaJiang/Twitter-Sentiment-Classification> Dec 2016

- Built up a Twitter sentiment classification system based on four different models: Naive Bayes, SVM, CNN, LSTM
- Pre-processed the data using regular expression for hashtags, username, emoticons, repeating characters and so on.
- Trained Naive Bayes and SVM using scikit-learn, CNN using TensorFlow and LSTM using Lasagne.
- Achieved around 76% Test Accuracy for Naive Bayes and SVM and around 84% Test Accuracy for LSTM and CNN.
- Designed a web application using Flask and Bootstrap to predict the sentiment of tweets based on a selected topic.

**Storefront Recognition** - [https://github.com/MinghuaJiang/storefront\\_recognition](https://github.com/MinghuaJiang/storefront_recognition) Dec 2016

- Constructed a storefront recognition system based on the combination of supervised and unsupervised learning.
- Trained AlexNet using Torch based on Yelp Challenge dataset.
- Implemented KNN based on SIFT leveraging Yelp API and Google Street View Image API.
- Combined the model together to achieve 54% test accuracy and 51.2% test accuracy when generalize to unseen stores.
- Built a web application to recognize the store in the Google Street View on the fly and show related Yelp information.

**BoxLink** - <https://github.com/MinghuaJiang/BoxLink> Sep 2016

- Built a Java based desktop file sharing tool which allows user to drag and drop files into it and get the shared link from clipboard automatically based on Box Restful API without opening browser.
- Implemented the user authentication and authorization based on OAuth2.

## Technical Skills

**Languages:** Java(Expert), Perl(Expert), Shell Script(Expert), Python(Intermediate), Lua(Familiar)

**Java Frameworks:** Spring, Google Guice, JUnit, Hibernate, Google Guava, EHCache

**Machine Learning Tools:** Torch, TensorFlow, Keras, Theano, Lasagne, scikit-learn, NumPy, SciPy, NLTK

**Software Engineering:** Requirement Analysis, OO Design, Agile Process for Software Development, Software Testing.

**Web Technologies:** Restful Web Services, JMS, Java EE, Web Containers like Jetty, Tomcat, Websphere

## Certification

Oracle Certified Professional Java SE 8 Programmer Feb 2016

(<https://www.youracclaim.com/badges/b677ee45-eede-464b-ac14-85156fedf3dd>)

Oracle Certified Professional Java SE 7 Programmer Jan 2016

(<https://www.youracclaim.com/badges/8d069bd3-ce4b-4e49-a4f9-f019b188a6d5>)

## Awards & Honors

**Citi CTO Platinum Excellence & Dazzle Award 2015 Q4** Dec 2015

Quarterly Citi CTO Global Award for those who have inspired team excellence through leadership and consistently demonstrated outstanding performance and leadership.

**Citi Spot Award 2013 Q4** Dec 2013

Quarterly Citi Regional Award to recognize and reward employees regionally with best quarterly project contribution.