

# SHANGWEN YAN

AVALON FORT GREENE, Brooklyn, NY 11201 | C: 347-320-7075 | [sy2160@nyu.edu](mailto:sy2160@nyu.edu)

## EDUCATION

**New York University** 05/2019  
Master of Science, Electrical Engineering Brooklyn, NY, U.S.  
Coursework: Machine Learning, Data Structure & Algorithms, Internet Architecture & Protocols

**Beihang University** 07/2016  
Bachelor of Engineering, Electronic Information Engineering, GPA: 3.24/4 Beijing, China  
Outstanding Graduate, granted by Beihang University in January 2016

## RELATED EXPERIENCES

**Tarena International Inc** 09/2016-08/2017  
– *Software Engineering Intern* Beijing, China

- Participated in the development of e-commerce platform “JingTao”
- Focused on backend development with SSM framework to implement the business logic

**Network Security Laboratory, Beihang University** 07/2015-08/2015  
– *Research Assistant* Beijing, China

- Participated in the design and production of the disposable password token,
- Injected Samsung chip program into tokens using self-studied assembly language

## ACADEMIC PROJECTS

**Prediction of Robot Power Consumption** (Python, Anaconda) 09/2017

- Implemented machine learning method to predict the current draw as a power consumption performance index, using attributes such as strain gauge measurements, joint angle, velocity, acceleration, etc.
- Trained multiple linear regression module on actual production data, and find the least squares solution
- Measured the fit on independent dataset and calculated the normalized RSS as reference

**Analysis of Browsing Data from Telecom Users** (NIO, ZooKeeper, Hadoop, Spark, ECharts) 06/2017

- Processed data to analyze user’s favorite app, website, time online and places that surf most frequently
- Distributed design: one jobtracker converted data into object and distribute file split to next stage, two first-stage engines calculated data, one second stage engine merged and stored data to MySQL database
- Visualized data to form concise and elegant statistical graph with ECharts
- Also have a standalone version using Spark RDD to implement the same function

**Collection & Analysis of Web Traffic Data** (Hadoop, Flume, Kafka, Hive, MySQL) 04/2017-05/2017

- Used JavaScript to make a request to log server after gathering website’s traffic data, such as pv, uv, vv, br
- Log4jAppender function in log server transmitted the data to Flume cluster (in avro form)
- Off-line data were saved in HDFS, processed in MR, Hive and stored in MySQL through Sqoop
- Real-time data was transmitted to Kafka and calculated in Storm to realize monitor and alert function

**E-Commerce Platform “JingTao”** (Java, JavaScript, CSS, HTML, MySQL, Redis) 01/2017-03/2017

- Developed backend logic with SSM framework(Spring, SpringMVC, MyBatis) in JAVA to access database and return processed data to the front page
- Deployed wars on Linux, implemented load balance and high availability through Nginx in roll polling
- Implemented cross-domain access through HttpClient and JSONP
- Improved SSO(Single Sign On) function with user’s ticket stored on Redis
- Self-learned jQuery, zTree, AJAX, EasyUI skills to better fit the data format in frontend

## TECHNICAL SKILLS

<b>Programming Languages:</b>	Java, Python, Shell, Scala, JavaScript, HTML, CSS, R
<b>Operating Systems:</b>	Windows, MacOS, Linux (CentOS)
<b>Database Development:</b>	SQL (MySQL, Oracle), NoSQL (HBase, Redis)
<b>Frameworks:</b>	SSM(Spring, SpringMVC, MyBatis), Hibernate, jQuery, EasyUI, zTree
<b>Visualization Tools:</b>	ECharts, R, Excel, MATLAB
<b>Big-data Related:</b>	Hadoop, ZooKeeper, Hbase, Hive, Flume, Kafka, Storm, Spark
<b>IDE &amp; Softwares:</b>	Eclipse, Anaconda, SQLyog, PowerDesigner, VMware, Xshell, JSONView
<b>Others Skills:</b>	Nginx, Maven, SVN, Sqoop, Avro, NIO(Concurrent Package), RESTful, Git