# **Mingjun Tang**

#### 414-334-1784 | mt4145@nyu.edu | tommytang1220.com | github.com/tommy1220

### **OBJECTIVE**

Over five years of proven skills in software developing, designing, testing, and analyzing. Understand existing coding standards, codes and practices. Currently seeking software engineering full time job in a fast-paced tech environment to utilize well-honed skills in software engineering.

### **EDUCATION**

**New York University** 

New York, NY

• M.S. in Computer Science (Academic Scholarship)

Aug.2019 - May. 2021 (Expected)

GPA: 4.0/4.0

University of Washington (transferred from Lehigh University)

Seattle, WA

• B.S. in Computer Science Software Engineering

Aug.2014 - Jun. 2019

GPA: 3.73 / 4.0 – Awards: Dean's List, National Honor Society, 2019 Quarterly Best Rated Computer Science Tutor

## **TECHNICAL SKILLS**

Programming Language: Java, Python, Haskell, Scala, C++, Julia, SQL, Matlab, R

Frontend: HTML, CSS, JavaScript, JQuery

Tools/Frameworks/UI/UX: AWS, Spark, Django, Android Studio, MySQL, Unity 3D, RPG-Maker, R-Studio

Project Portfolio Management (PPM): Oracle-Primavera Unifier, Oracle-Primavera P6

#### **WORK EXPERIENCE**

Palo Alto Networks, Inc | Software Engineer Intern

05/2020 - 08/2020

- Implemented Telemetry Normalizer to handle firewall bundles data pipelining ELT (extract, load, transform) from Google Cloud Platform (GCP)
- · Introduced and applied functional programming and Spark RDD parallelism to parallelize data parsing, transforming, and publishing
- Implemented parallelism on both Google Cloud Storage file handling from the tenants' side, data aggregation and ORC publishing to GCP BigQuery
- Increased program efficiency by over 500% on the base case (1 firewall bundle), and 3300% on the generic cases (15+ firewall bundles)

## **Oracle Software System Corporation, Ltd.** | *Software Engineer Intern*

05/2017-07/2017

- Optimized and redesigned database application in more than 5 classes in MySQL for a gas processing project contracted between Russia and China
- Increased efficiency of document control flow of the gas processing project's first stage by designing and implementing 2 Transmittals by using Oracle Project Management Tools *Primavera Unifier*. Simplified functional testing, performance testing, and deployment to various environments
- Provided fundamental models for more than 10 Business Processes for a local Chinese Ethylene reforming factory project by using Oracle Project Management tool Primavera P6

## UC Berkeley, Haas School of Business – Global Financial Data Project (Remote) | Data Science Intern

01/2017 - 04/2017

- Worked in a team of 5 (20+ teams in total) responsible for collecting and analyzing data from more than 200 international hotels based on different metrics; contributed about 5% of the entire data sets for the whole GFDP teams
- Participated in the entire software development lifecycle and applied Scrum development process
- Utilized financial metric database *BizQualify*, *CrunchBase*, and R-studio to analyze datasets from about 5 government/non-government companies; assisted GFDP to model and track the corporate structure of businesses via government filings and online research

# **PROJECTS**

#### **AWS Virtual Smart Assistance Robot**

01/2020 - 05/2020

- Developed a micro-services-driven serverless trained virtual robot on AWS Cloud platform that provides 3 major interactive services:
- (1) <u>Restaurant Recommendation Chatbot</u>: scratch 5000+ New York restaurants information by Yelp API and store on **DynamoDB**; use **ElasticSearch** services to enable bulk indexing operations when searching; interact with users according to user's criteria for restaurants (time, number of people, location, cuisine type, phone number) by **AWS Lex** chatbot and send **SNS** responses to user's phone with recommendations
- (2) <u>Smart Photo Album</u>: allow users to upload photos, index them using AWS **Rekognition** and store photos to **Virtual Private Cloud (VPC)**; interact with users by trained **Lex** chatbot, allowing users to use natural language search using text or voice with specified criteria through **ElasticSearch**
- (3) <u>Virtual Smart Door</u>: Stream in visitor face information using AWS **Kinesis Video Streaming** and **Rekognition**; send visitor virtual door owner via **SMS** email; store owner-verified visitors' information to **DynamoDB**, send one-time-passcode to visitor via **SNS text message**

# "Visual Assist" – Google Vision Cloud-Based Text-Reading Assistive Android Application for Blind People Accessibility 07/2019 – 08/2019

- Built an Android mobile application to help blind people to read; Conducted Robolectric unit testing and Espresso continuous Integration testing
- Implemented Android frontend to support Camera, Photo Gallery Access and Image rendering features
- Implemented HTTP image upload operations and response parsing with multithreading Android accessible user interface design
- Deployed the web service with docker and Google Cloud Vision API to a Google Kubernetes Engine cluster for better scalability and reliability
- Enhanced in-depth Android Accessibility and tested the app with eyes blindfolded

### **Fake Twitter Tweets Identifier Android Application**

03/2019 - 06/2019

- Worked in a team of 2 to build an Android App that analyzes a Twitter tweet's credibility based on two Machine Learning models (J48, SVM), feature vectors, Google reverse image search, and Python sentimental analysis
- Implemented different views for the frontend part in Android Studio, mainly the Home Fragment, User Authentication Fragment, Twitter Tweet's Analyzing Fragment, and Data Report Generation Fragment
- Implemented RESTful backend services that extract Twitter Tweets' data and convert them to feature vectors, and also handles different requests passed from frontend
- Deployed Android App to AWS, allowing users to provide opinion/votes; aggregated data from users to dynamically update analysis report

# Django Full Stack Instagram Simulation Web Application

05/2019 - 07/2019

- Designed and developed a social media (Instagram-alike) web application using Django framework
- Applied MVC pattern (Model-View-Template): posting user posts, editing/deleting posts, creating/viewing/editing user profiles, building user connections, commenting, making "likes" on others posts, signing up, logging in/out
- Implemented front-end services using Django's templates: HTML, CSS, JavaScript, AJAX, and deployed the website to Heroku