Yong (Caleb) Zhou

**San Jose, CA |** [**yesyong@bu.edu**](mailto:yesyong@bu.edu) **| +1 (718) 813-4377 |** [**LinkedIn |**](https://www.linkedin.com/in/yong-zhou-03149b106/) [**Github**](https://github.com/YongLAGCC)

# EDUCATION

**Boston University** *(Graduated: Jan 2020)* Dec 2017 – Jan 2020

*Bachelor of Computer Science*

* Related courses: Applied **Java** in data structure, Algorithm, SQL | Computer Programming | Tool of Data Science in

**Python** | OOP system in **C++** | Full Stack Dev in **JavaScript** | Tool of Data Science in Pandas, NumPy, Kmeans, SVM

# WORK EXPERIENCE

Software Development Intern, *AEVEX Aerospace* May 2019 – Aug 2019

* Tools: Python, Machine Learning, TensorFlow, CNN
* Created Mask R-CNN model for the detection and segmentation on infrared images with fires for replacing helicopters detection by drone’s detection that would reduce 50% budget per month
* Outperformed 85% overlay with ground truth on test data set and customized in collecting labeled samples and tune **R-CNN**

parameters in improving classifier performance

* Implemented Python scripts to standardize input format of JSON file to fit the requirement of the model for the grand-truths

Web Development Intern, *BCTC technology* Sep 2017 – Jan 2018

* Tools: **Node.js**, MongoDB, JQuery.js, **ES6+,** Bootstrap, React.js, HTML, CSS, **Git**
* Implemented dynamic websites for real-estate agent using JavaScript and generated 4 Million in total growth per year by devising different techniques in server-side and client-side development
* Implemented user login via third-party Oauth protocol by using passport.js library to look up user info, create profiles and decode cookies
* Created a MongoDB schema and module to save data in our data base and display products on different thumbnails to clients

Big Data Developer and Undergraduates Research, *NSF* Jun 2017 – Sep 2017

* Tools: Python, RapidMiner, Machine Learning (Topic Modeling), Scikit-Learn, Excel
* Implemented data cleaning and business logic to derive customers and products departmental KPI
* Identified driving factors (customer purchase frequency, monetary decision, etc.) for downstream analysis and modeling for Customer churn statistics prediction
* Developed Cross-validation that outperformed he baseline model by 4% to improve the supermarket decision making

# PROJECTS

[Healthy Tracking Application (](https://github.com/YongLAGCC/Mosso_)**Android App) |** Boston University Nov 2019

* Tools: Java, Google Fit API, Google Map API, Redis, **AWS Lambda**
* Designed and Created an Android app to track user’s and their friends’ daily steps and health status
* Implemented the backend services for saving and broadcasting the running statistic (e.g. steps and locations, etc.)

[Web Development on Shopping Cart Sep](https://github.com/YongLAGCC/Shopping-Cart) **-** Nov 2018

* Tools: Node.js, Stripe API, Handlebar.js, MongoDB, Express.js
* Designed and Created online shopping cart for our users to display, save, check out and make payments on products
* Applied and Implemented MVC principle to self-thought by researching and planning logically

[Data Analysis on Tesla Inc’s Stock and Media **|**](https://github.com/YongLAGCC/Tesla-Inc-s-Stock-and-Media-) Boston University Dec - Nov 2018

* Tools: **R**, Python, Shiny, NLP, Machine Learning, AWS
* Evaluated effects of media sentiment on the predicted price of Tesla stock using regression analysis
* Delivered real-time insights to help beginners and professionals trade through Shiny app deployed on AWS

[Role-Playing Game (](https://github.com/YongLAGCC/cpp_game)**C++**) Dec 2016

* Designed a zombies vs human role-playing video game with multiple files, classes and modules containing different functionalities
* Applied OOP principle to encapsulate functionalities and make implementation extensible and reusable

# SKILLS

* IDE: Eclipse | Visual Studio | Android Studio | Visual Studio Code | Jupyter Notebook | PyCharm | Dr. Java | RStudio
* Programming: Java | Python | C++ | Node.js | React.js, Express.js | MySQL | Linux | Amazon Web Services|
* Database: MongoDB | MySQL | NoSQL | Redis | Spark | Distributed Hash Tables
* Hobbies: Reading | Guitar player | Cooking