

# Tom Cai

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1 Brookings Drive, Saint Louis, MO

## SUMMARY

- **Objective:** 2020 Summer Software Developer Internship  
Bachelor degree candidate has a wide range of internship experience and project experience, including Full Stack Development.

## EDUCATION

### Washington University in St.Louis

Bachelor of Science in Computer Science; GPA: 3.5/4.0

Missouri, USA

Expected May 2021

### Denison University

Bachelor of Art in Mathematics; GPA: 3.5/4.0

Ohio, USA

August 2016 - June 2019

## SKILLS

- **Languages:** Java, HTML5/CSS3, Python, JavaScript, PHP , SQL
  - **Tools:** Kubernetes, Docker, Nginx, AWS, GIT, Elastic Search, Restful API, Google FileBase, Webpack
  - **Framework:** SpringBoot/Spring MVC/Spring, Spring Data JPA, Spring Security, Hibernate, ReactJS, Vue, jQuery, HBase, JDBC
- Database:** MySQL, MongoDB, Redis  
**Test:** JUnit, Mockito

## EMPLOYMENT EXPERIENCE

### Unibit Inc: Similiar to Yahoo finance

Full Stack Software Intern

Allston, MA

May 2019 - August 2019

- **Unibit API** : Java-based platform to offer standardized financial data and information
  - \* Implemented web application based on **SpringBoot** to provide thousands of different format finance data including JSON and EXCEL
  - \* Utilized **Hibernate**, **Spring Data JPA** to provide normalization in **MySQL**, which contains more than **500K** records
  - \* Decomposed tables in third normal form (**3NF**), reducing data size to **10%**, optimizing complex query performance, saved **21%** query time
  - \* Accomplished cache with **Redis**, increasing performance and reducing response time by **90%**
  - \* Automated system deployment with **Docker**, **Nginx** on **AWS EC2** server and **AWC ELB** as load balancer
  - \* Cooperated with Product Manager to compose Unibit API documentation for over 1000 paid customers, staff from **Accenture** and **Salesforce**
- **Data Terminal:** Client-side **PHP**-based platform to get more comprehensive and commercially valuable data
  - \* Developed intelligent search engine using **Elastic Search** Cluster server, minimizing time of searching finance data up to **55%**
  - \* Used **Kubernetes** for event analysis and created **MongoDB** shared cluster for storage
  - \* Researched multiple recommendation algorithms and combined **machine learning**, **deep learning** to oversee the relationship between stock price and news so that each paid customer can minimize investment risk, saving stocking cost for over **10K\$**

### Huanshitong Construction Machinery Company

Software Engineer Intern

Baotou, Inner Mongolia

July 2018 - September 2018

- **E-Inventory Management System:** Client-side **PHP**-based platform to get more comprehensive and commercially valuable data
  - \* Developed intelligent search engine using **Elastic Search** Cluster server, minimizing time of searching finance data up to **55%**
  - \* Used **Kubernetes** for event analysis and created **MongoDB** shared cluster for storage
  - \* Researched multiple recommendation algorithms and combined **machine learning**, **deep learning** to oversee the relationship between stock price and news so that each paid customer can minimize investment risk, saving stocking cost for over **10K\$**

### OSSCube

Software Engineer Intern

New Delhi, India

May 2015 - Aug 2015

- **Squeek Twitter iOS:** Designed and developed Twitter client using Fabric SDK

## PROJECTS

- **BootDo Background Management System:** Java-based Background Management system, including System modulo, Office modulo, blog modulo, and department modulo
  - Integrated a dashboard using **React**, **D3** and **Ant Design** to visualize the sales of iPhone product in China
  - Fetched the blog and office data from Alibaba API
  - Optimized the user experience by adding style bar to alter the style of website, using **jQuery**
  - Developed a **Spring Web Flow** to support item ordering
  - Instituted **Spring MVC** backend part of different modulo functions, using **SpringBoot**
  - Utilized **Mybatis** and **Hibernate** to provide better support of database operations