# **Haocheng An**

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### **EDUCATION**

# The University of Texas at Austin

**Expected May 2019** 

Bachelor of Science in Computer Science, CS

Cumulative GPA 3.9/4.0

Bachelor of Science in Mathematics, Mathematical Sciences

Master of Science in Computational Science, Engineering and Mathematics

#### RELEVANT COURSEWORK

(CS) Big Data Programming, Database, Machine Learning, Neural Networks, NLP, Programming Language (M) Regression, Stats, Probability, Stoc process, Numerical Analysis, Math Modeling, MCMC

# **SKILLS**

**Programming Language** Java (Hadoop, Spark)/C

Script Language MATLAB/SQL/R/Python/HTML

#### **WORK EXPERIENCE**

## Software Development Intern, Oracle Corporation, Boston, MA

*May 2018-Aug 2018* 

- Implement file systems' latency metric in C and post it on Grafana Dashboard to monitor the system
- Automate meter report to DB process by Python and write SQL queries to track server/user behavior
- Predict user number& aggregation file size using LSTM, regression and Bollinger Bands with error ~2%

# Software Development Intern, Cisco Systems, Inc, Dallas, TX

Jun 2017-Aug 2017

- Query more than 9000 result counts for each 4 nodes and 5 service ID from Kibana using Elasticsearch
- Predict count's normal interval for sparse count cases using statistical methods and ARIMA thoughts
- Develop Python micro service to alarm engineers if actual count falls outside of the normal interval

## Research Intern, Institute for Computational Engineering and Sciences, Austin, TX Jun 2016-Aug 2016

- ●Implement condition number estimation of matrices with dimensions 500~10000 using C and BLIS
- Co-Plot the performance and accuracy of the estimations by MATLAB and compare with LAPACK
- Draft a 16-page research report, design a poster and present to fellows, PhDs, and professors

# Undergraduate Assistant, College of Natural Sciences, UT Austin, Austin, TX

*Jan 2015-Dec 2017* 

- Offer guidance on math, physics and/or computer science problems to 10 students each week
- Provide advice to students on test preparation and taking strategies and course registration
- Grade the programming and proof homework for applied number theory class

# **SELECTED SIDE PROJECTS**

#### **Call Log Classification Hackathon**

Jan 2018

- Extract 5 features for all 400k call logs and digitalize it to a 400k dimension matrix
- Develop a CNN through tensorflow to analyze the matrix and achieve 97% accuracy on classification

Tic-tac-toe Game Mar 2017

- Implement the Platform to Support man vs man, man vs machine Tic-tac-toe game on the 3\*3 board
- Implement 5 different level of machines' strength for the man vs machine mode in Java

### **HONORS AND AWARDS**

Early membership (Junior Elected) of Phi Beta Kappa	Nov 2016
Nominee of Unrestricted Endowed Presidential Scholarship by Department of Mathematics	Feb 2016
Top 25% in William Lowell Putnam Mathematical Competition, Austin, Texas	Dec 2014