

# 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) Data Structure, Algo, Big Data Prog, DBMS, Machine Learning, Neural Networks, NLP

(M) Real Analy, Stats, Probability, Stoc process, Num Analy, Linear Alg, Modeling, MCMC

## SKILLS

**Natural Language** Chinese

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

**Computer Tools** Word/PPT/Excel/LaTeX

**Script Language** MATLAB/SQL/R/Python/HTML

## WORK EXPERIENCE

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

*May 2018-Aug 2018*

- Implement file systems' min, max and average latency metric in C and post it on Grafana Dashboard
- 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*