

# Haocheng An

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## EDUCATION

### The University of Texas at Austin

Bachelor of Science in Computer Science, CS

Bachelor of Science in Mathematics, Mathematical Sciences

Master of Science in Computational Science, Engineering and Mathematics

**Expected May 2019**

Cumulative GPA 3.9/4.0

## 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, DiffEq, Modeling, MCMC

## SKILLS

**Natural Language** Chinese

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

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

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

## WORK EXPERIENCE

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

*May 2018-*

**Software Development Intern, Cisco Systems, Inc, Richardson, 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**

*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*