

Haocheng An

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EDUCATION

The University of Texas at Austin

Aug 2017-May 2019(Expected)

Master of Science in Computational Science, Engineering and Mathematics

GPA 3.66/4.00

The University of Texas at Austin

Jan 2014 - May 2018

Bachelor of Science in Computer Science, CS

GPA 3.92/4.00

Bachelor of Science in Mathematics, Mathematical Sciences

RELEVANT COURSEWORK

(CS) Big Data Programming, Database, Machine Learning, Neural Networks, NLP, Programming Language
(Math) 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

- Augment 12 metrics from meter report, remove duplicates walker result and post them on Grafana
- 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

RELEVANT PROJECTS

Call Log Classification Hackathon

- 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

MapReduce

- Implement Inverted Index, User Sessions by using Hadoop and Spark respectively
- Utilize AVRO Files and Hadoop to characterize the behavior of users by analyzing user session data
- Use Spark MySQL interface to get average, min, max of large data set

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

Dec 2014