

Wentao Yang

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EDUCATION

The University of Texas at Austin

Bachelor of Science, Computer Science and Mathematics

Expected: May 2023

Cumulative GPA: 3.86

Relevant Coursework: Data Structures; Algorithms; Artificial Intelligence; Computer Architecture; Concurrency; Neural Networks; Object-Oriented Programming; Operating Systems; Software Engineering; Linear Algebra; Differential Equations

Current: Compilers

PROFESSIONAL EXPERIENCES

Google; Incoming Software Engineering Intern; Sunnyvale, CA

May 2022 - Aug. 2022

Google; STEP Intern; Remote

May 2021 - Aug. 2021

- Developed and documented an internal legal freeze CLI tool that freezes log buckets in Google Cloud projects, delaying all data deletion requests until the freeze is over
- Modified over 5k+ LOC using C++ and worked with Cloud Logging's time-series storage system and Spanner databases
- Wrote hermetic integration tests using Google's framework and unit tests using GTest with 96% code coverage
- Volunteered as a Teaching Assistant for Google CSSI during project week

HouseCanary; Intern; San Antonio, TX

Jul. 2017

- Forecasted the number of single-family homes that will be built in Bexar County, TX annually until 2030
- Gained experience working with R and its Fourier and time series analysis packages
- Utilized logistic growth and ARIMA models to estimate future values for 3 factors and variables in a multivariable linear regression model within the forecast

PROJECTS

N-body Simulation, Personal

Dec. 2021

- Created a class for generating n-body simulations, simulations of particles under the influence of physics, using C++
- Optimized for performance using parallel implementations, with up to 5x speedup using POSIX threads and CUDA
- Used Python and its Matplotlib library to animate and visualize the simulation results in 3D

COVID-19 USA Hotspot Forecast, Group

Oct. 2020

- A predictive model of future coronavirus hotspots using data science developed during HackTX 2020
- Calculated future daily increases in the number of cases per county and normalized for the population using NumPy
- Constructed a one-page React application containing a map of U.S. counties and calendar to illustrate the forecast
- Deployed on Microsoft Azure and used GitHub Actions as CI/CD

Stock Database Application, Personal

Aug. 2020

- A React-Bootstrap application that stored daily historical data for stocks that can be easily accessed for analysis
- Designed and stored historical data for 17 stocks in InfluxDB that could be easily visualized using Grafana
- Employed Django as the backend framework and designed the API, which is documented with Postman

RockinWithTheRona, Group

Jul. 2020

- Provided information on top Spotify albums and tracks since the 1950s and deployed on AWS using EC2
- Designed a multi-relational database architecture using PostgreSQL, Flask-SQLAlchemy, and UML
- Wrote a script to automate the creation of the database and unit tests for the database
- Aided in creating the server using Flask as the backend framework and the API and integrated with GitLab CI/CD

Outlier Flagger in Thermal Images, Personal

Oct. 2019

- Flagged gray-scaled thermal images that contained outlier regions with Java and developed a UI using JFrame
- Investigated bizarre temperature outliers when compared to surrounding areas using stacks and recursion
- Presented to and shared with U.T. employees looking to expedite locating damages on rooftops via GitHub

LEADERSHIP & AFFILIATIONS

Association of Computing Machinery, Member

Aug. 2019 - Present

- Attended multiple lectures on various topics within Computer Science

Resonance, Co-founder, Quarter Zero's Catapult Incubator

Jun. 2018 - Jan. 2019

- Sought out unused musical instruments to donate to children of underprivileged families
- Created a simple HTML and CSS website for families to be able to connect to us

Mu Alpha Theta, Vice President

Aug. 2018 - Jun. 2019

National Honor Society, Treasurer

Aug. 2018 - Jun. 2019

SKILLS & INTERESTS

Languages

- C++; Python; Java; C; Javascript; R

Technologies

- React; Django; Flask; SQL-Alchemy; PostgreSQL; InfluxDB; Bootstrap; UML; Postman; Git; CUDA