

# Kathy Wang

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## Objective

Looking for internship position in data science, machine learning, software development, or related fields.

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## Education

Rice University, Master of Computer Science

Aug 2021-May 2023  
(Expected)

GPA: 3.83

**Courses:** Machine Learning, Deep Learning for Vision and Language, Ethics in AI, Big Data Management, Statistics in Data Science, Genome-Scale Algorithms and Data Structures

University of Texas at Austin, Bachelor of Science and Arts Biology

Aug 2016-Dec 2020

GPA: 3.7653

**Certificates:** Elements of Computing, Pre-Health Professions

**Courses:** Web Programming, Software Design, Databases, Data Visualization, Multivariate Calculus, Linear Algebra, Bioinformatics, Digital Media Production, Clinical Psychology, Cultural Anthropology, Animal Behavior

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## Skills

**Programming Languages and OS:** Python, Java, C, SQL, R, HTML, CSS, PHP, JavaScript, Linux, Git, Visual Studio Code

**Data Science:** Machine Learning, Deep Learning, NLP, Neural Networks, Numpy, Pandas, Pytorch, TensorFlow

**Databases:** MySQL, MongoDB, Neo4j, Firestore, AWS, Hadoop, Spark, BigQuery, GCP

**Digital Art, Design, Communication:** Adobe Photoshop, After Effects, Illustrator, Microsoft Office, Tableau

**Organic Chemistry:** NMR, Gas Chromatography, Distillation, Synthesis

**Biology Labs:** Handling live specimens and cell cultures, Dissection

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## Projects | <https://kathyJW.github.io/projects/>

### Machine Learning and Deep Learning

- Built neural network models to predict whether a person had heart disease based on survey responses obtained by the Behavioral Risk Factor Surveillance System (BRFSS). Focused on reducing the bias of available data and balancing it through K-nearest neighbor methods and adjusting class weights.
- Worked with partner to create a Convolutional Neural Network (CNN) encoder, Long Short-Term Memory (LSTM) decoder, and Attention model that predicted book titles based on their image covers. Idea was based on image captioning, but with book titles instead of descriptive sentences.

### Data Analysis

- Data analysis of COVID-19 impact on Austin Animal Shelter adoptions by exploring the shelter data using R.
- Investigated flight delay data from the Bureau of Transportation with storm event data from National Oceanic and Atmospheric Administration using Google Cloud Project, BigQuery, Apache Beam, and SQL. Created database model and cleaned raw data to use in queries to find relations of interest.

### Data Visualization

- Team project to visualize volcanic eruptions around the world. Used Python and Altair to create interactive map and legend.

### Web Programming

- Worked with a team to create a flight booking site that allowed the user to book flights by origin and destination. Implemented HTML, CSS, AJAX, PHP, JavaScript, and MySQLi to create an appealing front-end and back-end that could access a SQL server.
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## Work Experience

### Pharmacy Technician at H-E-B Pharmacy

Aug 2018-Aug 2019

- Worked with team to provide healthcare and medication to community in retail setting.
- Problem Solving: resolved health insurance issues and medication filling mistakes
- Customer Service: communicated with customers and informed them of medication and their fillings
- Health Screenings: helped conduct free and paid health screenings checking glucose and cholesterol levels of patients using monitors provided by H-E-B and collecting blood samples
- Adapted to different environments: worked at multiple H-E-B locations with different team members and learned to adapt to workflow and communicate

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## Leadership and Service

### Chair in STEAM committee of Lions Club International at UT Austin chapter

2016-2017

- Learned to work in a committee, solve problems, and engage and inspire members to help others.
- Contacted volunteer coordinators from local Austin organizations to set up volunteering events, such as Very Special Arts (VSA) Texas. Led groups of volunteers from Lions Club at these events.
- Presented volunteer opportunities at weekly meetings.
- Introduced children to art, science, and engineering fields.
- Helped in local Austin clean-up projects, animal shelters, food drives, and community gardens. Provided food and interacted with the homeless directly.
- Carried out free eye examinations with Spot Vision Screener.
- Total of 160 Service Hours completed 2016-2017

### Officer of Collaborative Artists

2017-2020

- 2017-2018 Treasurer, 2019 Secretary, 2019-2020 President
- Maintained bank account and funds for social art club and events.
- Took pictures and organized them for end of year Gallery Night event.
- Collaborated with other officers to plan and host weekly meetings and socials.
- Interacted with members and promoted art discussion.
- Led team to cooperate and work together to host club meetings.

### Member of Longhorn Pre-Pharmacy Association

2016-2019

- Introduced in depth to pharmacy field through workshops.
- Volunteered at events around community and UT pharmacy school events.

### Cultural Interests Association Member

2017-2019

- Informed of different world cultures by speakers at bi-monthly meetings.

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## Other

Authorized to work for any US employer. No sponsorship required.