

# Chaoyang Zhu

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**Objective:** Seeking Summer/Fall 2021 Internship in Software Engineering

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## EDUCATION

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### Texas A&M University

College Station, Texas

- Master of Science in Computer Engineering GPA: 3.88

08/2019 - 05/2022

### Nanjing University of Information Science & Technology

Nanjing, China

- Bachelor of Engineering in Internet of Things Engineering GPA: 3.86

09/2015 - 06/2019

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## GRADUATE COURSES

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- Software Engineering
  - Analysis of Algorithms
  - Data Mining and Analysis
  - Artificial Intelligence
  - Machine Learning
  - Information Storage and Retrieval
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## TECHNICAL SKILLS

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- **Programming Languages:** Python, Java, C, C++, JavaScript, HTML
  - **Frameworks and Technologies:** CSS, Bootstrap, Node.js, Express, EJS, MongoDB, MySQL, Linux, QT, AWS Cloud9
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## PROJECTS

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### Web Development

08/2020 - present

- Created my personal website using HTML and CSS, hosted it on GitHub Pages
- Implemented a startup website showing a mobile application using Bootstrap
- Developed a local blog system by Node.js and Express, connected it with the local MongoDB database

### To-Do List Application

10/2020 - 11/2020

- Developed a To-Do List web application by Node.js, deploy the server with Heroku
- Used EJS to generate different HTML web pages for different To-Do Lists
- Processed the application data with MongoDB, deployed the database to MongoDB Atlas

### Machine learning with Pokemon GO

09/2020 - 10/2020

- Data exploration: visualized the scatter plots and computed the Pearson's correlation coefficient between the numerical attributes themselves and the combat points
- Pre-processed the categorical attributes with the one hot encoding
- Implemented a Linear Regression model to predict the combat points, used 5-fold cross-validation to evaluate the model.

### Search engine

01/2020 - 03/2020

- Tokenized queries and documents, removed stop words and stemming with nltk packages
  - Built an inverted index to support Boolean Retrieval, ranked the documents with TF-IDF and BM25
  - Improved the engine by generating word embeddings for tokens in the dataset using Word2Vec algorithm
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## EXPERIENCE

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### Tarena

07/2018 - 08/2018; 01/2019-04/2019

- Received intensive and systematical training of Java and C++ programing
  - Developed an E-reader application on Android Studio by Java. Provided user with different novels on the home page. Provided them with functions of changing the font size and background on the reading pages
  - Developed a Pop Star game application on QT framework by C++. Designed a user-friendly gaming interface. Designed the algorithm to pop stars when the condition holds. Added the sound effects and scoring function when stars are popped.
  - Implemented a client program speaking to a server by C++. Realized the functions of requesting data points, requesting binary files, and requesting new channel creation. Run the server process as a child of the client process.
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## WORK AUTHORIZATION

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- Eligible to intern in the U.S. with CPT