

# Yinglan Chi

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## EDUCATION

### University of California, San Diego

*Master of Science in Computer Science*

San Diego, CA

*Sep. 2022 – Jun. 2024*

**Coursework:** Machine Learning, Network Systems, Optimization, Recommendation Systems, Data Visualization

### University of California, San Diego

*Bachelor of Science in Mathematics-Computer Science*

San Diego, CA

*Sep. 2018 – Jun. 2021*

**Honors:** Provost Honors

**Coursework:** Object-Oriented Design, Algorithm Design, Data Structures, Software Tools, Computer System, Numerical Analysis

## TECHNICAL SKILLS

**Software Engineering:** C++, Go, Java, JavaScript, Objective-C, WPF

**Machine Learning:** Python (TensorFlow, Scikit-learn, Matplotlib), MySQL, MATLAB

**Big Data Engineering:** Hadoop, Hive, Spark, MapReduce

**Developer Tools:** Git, VS Code, Visual Studio, IntelliJ, Eclipse, Linux

**Soft Skills:** Passionate, Eager to Learn, Teamwork, Strong Communication

## PROFESSIONAL EXPERIENCE

### Software Engineer Intern

Jul.2021 – May.2022

*ByteDance*

*Beijing, China*

- Built GBDT model with mass data collected from Toutiao news app's in-app questionnaires using Python and MySQL to identify hardcore fans for Toutiao creators in order to boost user-author interaction.
- Established model that ranked 3 million short video creators using Logistics Regression, PageRank algorithm, Python, and C++, which improved total video view counts significantly by 2%.
- Conducted feature engineering on user stay time model using Python and TensorFlow, utilized C++ to make the updated model online in the Recommendation System.
- Identified pain points provided by A/B testing, provided solutions to refine the models that increased the model accuracy from 75% to 81%, and kept track of improvement progress by working with different departments.

### Frontend Development Intern

Jul. 2020 – Oct. 2020

*ACM Research Inc*

*Remote*

- Designed and developed new feature of showing top5 recently opened files in menu bar in the company's application using WPF and C#.
- Designed interactive animation for password login feature following Custom Control/User Control design pattern.
- Built application test systems with mentor and reported project status with product management team.

## PROJECTS

### HTTP Web Server Design | *Golang, Client/Server Protocol, Unit Testing*

Feb.2023

- Designed a web server that implements a subset of HTTP/1.1 protocol specification (200, 400, 404 responses) using socket level programming in Go.
- Designed a server that supports HTTP pipelining of requests/responses with a timeout mechanism.
- Followed test driven development approach for developing features and wrote multiple unit tests and end-to-end tests for maximizing testing coverage.

### Distributed Network Sorting | *Golang, Network Programming, Multi-threading*

Jan.2023

- Designed a distributed sorting program that run concurrently on all given servers.
- Partitioned data holding mass number of records on each server using data partition algorithm.
- Constructed and opened sockets to send and receive partitioned data from peer servers concurrently using Go's net package and goroutines.
- Sorted the received partitioned data on each server using a custom comparator.

### Car Insurance Claim Prediction | *Python, Scikit-learn, Data Modeling, Cross-Validation*

Dec.2022

- Implemented logistic regression model, K-NN model, and Random Forest model on a dataset of size 58,592 to predict whether car policyholders will file an insurance claim within the next 6 months.
- Optimized the models with cross-validation by using GridSearchCV in the Scikit-learn package.
- Conducted model performance analysis with confusion matrix and accuracy, and selected the Random Forest model as the best model with accuracy of 0.92.

### Streamline Game Development | *Java, JavaFx GUI, EventHandler*

Sep.2020

- Implemented the Streamline game using Java and GUI that allowed players to interact with the game through keyboard.
- Used JavaFx to design the game screen layout, and applied EventHandler Interface to handle interactions.