# YU WAN

yuwansz2000@gmail.com | https://cyanh1ll.github.io | (217) 693-8853

#### EDUCATION

## University of Illinois at Urbana-Champaign

Major: Computer Science & Economics FA19-FA20 Dean's List member

Minor: Statistics Expected Graduation: Dec 2021

Relevant coursework: System Programming, Database System, Economic Statistics, Computer Architecture

## SKILLS

- Programming Language: Java (Experienced), C/C++ (Intermediate), Python (Intermediate), SQL, R
- Software: MySQL, Neo4j, MongoDB, Git, Tableau, R Studio, Android Studio, VS Code
- Language: Mandarin(native)

## PROJECT EXPERIENCES

## E-sport Data Analysis Mobile Application (Java, Android Studio)

Sept—Dec 2020

GPA: 3.82/4.00

- Integrated an Android application with crawled Esports data from official website and data analysis function
- Implemented the MySQL connection using servlet (Tomcat Server as web server and AWS as database platform)
- Fabricated the advanced function of predicting win rate using logistic regression.
- Conducted a full developing process of mobile application and related environment setting

## **Key Value Store with fault tolerance (C++)**

Dec 2020

- Engineered a key-value store supporting CRUD operations (Create, Read, Update, Delete).
- Applied load-balancing through a consistent hashing ring to hash both servers and keys
- Achieved Quorum consistency level for both reads and writes
- Built membership maintain mechanism using membership protocol based on GOSSIP theory

## **Membership Protocol based on GOSSIP (C++)**

Dec 2020

- Coded Membership Protocol from scratch based on GOSSIP theory in distributed system
- Ensured completeness and accuracy of failure detection when messages delays are small

## Machine Learning Classification Model (python, Jupyter Notebook)

Apr-May 2020

- Designed and implemented an individual python program to classify handwritten digits with MNIST dataset
- Programmed Machine Learning algorithms, including: Stochastic Gradient Descent, Adaptive Moment Estimation
- Built a classification model with accuracy of 91%

## Lease Search Application (Java, Android Studio)

December 2018

- Designed android application to integrate leasing resources around campus, including 10+ main rental properties
- Utilized Google Map API to develop function of displaying building locations
- Practiced skills in Object-Oriented Design of Android application

## CAMPUS ENGAGEMENT

## **Association for Computing Machinery at UIUC**

Champaign, Illinois August 2018—Present

Active Member

- Involved in the Special Interest Group of Game Builders and collaborated with groupmates to design a 2D card game
- Participated in the Association of Data Science and Analytics

#### The Chinese Students and Scholars Association at UIUC

Champaign, Illinois

Cooperative Member

August 2019—Present

Collaborated with other members to hold Moon Gala, the art event to celebrate Mid-autumn festival