

# Jinyang Jia

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**EDUCATION** **University of Illinois at Urbana-Champaign**  
*B.S. in Computer Science*

Expected May 2022  
GPA: 3.86/4.00

Relevant coursework: Discrete Structures, Data Structures and Algorithms,  
Computer Architecture, System Programming, Distributed Systems, Database  
Systems, Algs & Models of Comp, Programming Studio

**PROJECTS** **Music Explorer Website**

Urbana, IL  
Feb 2021 to June 2021

*Developer of application background and frontend interface*

- Setup a MySQL database with trigger and stored procedure to assist in data consistency on Google Cloud Platform
- Improved query performance by adding indices and lowered the operation costs from ten thousand to less than ten
- Develop website backend Flask api for querying data (MySQL) and rendering html webpage
- Built the application with utilities such as search, update, and delete
- See project files at <https://github.com/CS411-Salty-Fish/MusicExplorer>
- See website at <https://music-explorer-307006.uc.r.appspot.com/>

**RepoView phone application**

Urbana, IL  
April 2021 to April 2021

*Core Developer*

- Developed backend in JavaScript to login and retrieve github user information using graphql.
- Built pages in react-native to view user profile, repositories, followers and following information.
- Implemented stack navigation to enable click and view other users' information from Repository, Follower, and Following pages.
- See project file at <https://gitlab.engr.illinois.edu/jinyang6/sp21-cs242-assignment-3>

**Music Surfer Website**

Urbana, IL  
April 2021 to May 2021

*Core Developer*

- Developed frontend rendering application in react.js and supports search on three different music companies separated by three webpages
- Improved visual effect on each webpage using animations and coloring in CSS
- Built a scraper in python using bs4 package to collect music information and stored to a mongoDB database
- Developed the backend Flask api that accepts search requests on mongoDB database, and created index to improve search cost from linear time to constant time
- Implemented a self-expand search service. Specifically, if query is not hit, the backend shall query through api of music companies and store the resulted music information to mongoDB and provide to user.
- See project file at <https://gitlab.engr.illinois.edu/jinyang6/sp21-cs242-project>

**Maple-Juice distributed system**

Urbana, IL  
Sep 2020 to Dec 2020

*Developer of application background*

- Developed fault-tolerant distributed system based on gossip-heartbeat and all-to-all heartbeat.
- Built a cloud file management system with replication control upon machine joining, leaving, and failure in the cluster.
- Implemented loading files, deleting files, and viewing available files operations for users.
- Developed a map-reduce like service infrastructure for users to load custom scripts and receive results.

**SKILLS**

**Computer Science**

• Java, Python, HTML, CSS, C++, C, JavaScript, MySQL, mongoDB, Neo4j, d3.js,  
Tableau, NLP