# Xinzhuo Liu

liuxz2358@gmail.com **|** (857)-272-0108 **|** Boston, MA **|** uni-boy.github.io

## EDUCATION

**Northeastern University**                                                                                                                                     **Boston, USA**
*Master of Science in Information Systems*                                                                                    *Sep. 2021 - Jul. 2023*
Relevant Courses: Smartphones-Based Web Development (IOS), Web Development Tools & Methods, Web Design/ User Experience Engineer, Big-Data System Engineer Using Scala, Data Management and Database Design, Cryptocurrency/Smart Contract

**Jilin University**                                                                                                                                                   **Jilin, CHN**
*Bachelor of Science in Information and Computing Science | Minor Degree: Bachelor of English*          *Sep. 2017 - Jun. 2021*

## WORK EXPERIENCE

**IpserLab Inc.**                                                                                                                                         **Mountain View, USA**
*Software Engineer Intern*                                                                                                                      *Sep. 2022 – Dec. 2022*
- Designed company's website using **Figma** to improve readability and viewability, resulting in a more user-friendly interface
- Leveraged **Axios** and made HTTP requests with parameters using **JavaScript** from browser to server
- Conducted in-depth code review of backend code to identify and to extract relevant code to be used in APIs

**Institute of Computing Technology, Chinese Academy of Sciences**                                                          **Beijing, CHN**
*Research Assistant*                                                                                                                                   *Dec. 2020 – Mar. 2021*
- Utilized C++ and MATLAB to implement and analyze **Principal Component Analysis** (PCA) and **Linear Discriminant Analysis** (LDA) algorithms, comparing their feature extraction capabilities for effective classification
- Extracted facial features from a database of more than 500 facial images (ORL database) for face recognition purposes
- Used a neural network model to perform facial recognition on new, unseen images, achieving 90% accuracy

## PROJECTS

**User Management System** | Java, Spring, AWS, Hibernate, JavaScript, React                                                    **Boston, USA**
*Independent developer*                                                                                                                           *Dec. 2022 – Jan. 2023*
- Designed a server-side, database oriented user management web application in **Spring MVC** framework
- Utilized the **Ant Design** framework to develop user-friendly backend web pages
- Deployed a **PostgreSQL** database using **Docker** for local development and testing purposes
- Created a **CI/CD** pipeline to automate project updates on **AWS Beanstalk** and integrated with Slack to provide real-time notifications, enhance team communication and collaboration throughout the process
- Employed unit testing methodologies to conduct comprehensive testing of the project, ensuring robustness and accuracy of the code; leveraged the **H2** database for integration testing

**Game Recommendation System** | Scala, SwaggerUI, MongoDB                                                                      **Boston, USA**
*Team member*                                                                                                                                          *Mar. 2022 – May. 2022*
- Designed a game recommendation system using **Scala** and integrated with **Spark** to process large-scale data sets
- Utilized **MongoDB** using GUI to store and manage records in a scale of over 100k
- Implemented an integration framework consisting of Swagger UI and Scala to visually document and mange APIs and to reduce deployment time

**Realtime Chat App (Full Stack)** | JavaScript, React, MongoDB                                                                    **Boston, USA**
*Team member*                                                                                                                                          *Oct. 2021 – Dec. 2021*
- Developed a Node.js **Express**-based backend for a social media platform by implementing a **REST API** and leveraged **MongoDB** models and **Node.js** routers to create a robust and efficient infrastructure
- Designed and developed responsive web pages using **Bootstrap**, incorporating advanced features such as the grid system, typography, and forms to achieve optimal viewing and usability across different devices and screen sizes
- Leveraged **Socket.io** to implement real-time chat functionality, enabling seamless communication between users with a rapid response time of less than 10ms

## SKILLS

- Programming Languages:        Java, JavaScript, Scala, Swift, Python, Solidity, MATLAB, TypeScript
- Web Technologies:                  AWS (AWS Cloud Practitioner Certification), SwiftUI, HTML5, CSS, SASS, REST API, React
- Databases:                              MySQL, MongoDB, Microsoft SQL Server, PostgreSQL
- Tools & Service:                       Docker, IntelliJ, NetBeans, Eclipse, Visual Studio Code
- Version Control:                       Git, GitHub
- Hobbies:                                  Hip-hop, Basketball, Piano, Guitar