

# Marko Ljuboja

Chicago, IL | 708-420-1917 | [mljuboja16@gmail.com](mailto:mljuboja16@gmail.com)

[LinkedIn](#) | [GitHub](#) | [markoljuboja.com](http://markoljuboja.com)

## EDUCATION

**DePaul University, Jarvis School of Computing & Digital Media**, Chicago, IL Graduating November 2025

BS in Computer Science, Software Development Concentration, Spanish Minor, GPA 3.71

Relevant Coursework: Data Structures I & II, Design & Analysis of Algorithms, Systems I & II, Global Software Development

## SKILLS + STRENGTHS

### Technical

- **Operating Systems & Productivity:** Windows, macOS, Unix/Linux, Microsoft Office 365 Suite
- **Programming Languages:** Java, Python, C, C++, SQL, JavaScript, R
- **Web & Mobile:** HTML, CSS, React.js, Node.js, REST APIs, Swift (UIKit and SwiftUI)
- **Tools & Technologies:** SQLite, Git, Docker, PuTTY, JUnit 5, Gradle, Maven, Vercel, Google Cloud

### Soft Skills

- Strong leadership, effective communication, team collaboration, results-driven, self-disciplined, fast learner

### Languages

- English (native), Serbian (native), Spanish (working proficiency)

## PROJECTS

**Serbian-English Dictionary iOS App – App Store Link:** <https://apps.apple.com/us/app/serbdictionary/id6753670428>

- Developed a full-stack Serbian-English dictionary iOS app using SwiftUI, featuring bidirectional translation, dual script support (Cyrillic/Latin), and advanced search functionality with SQLite database integration.
- Engineered custom UI components, implemented iOS widget support, and alphabetical navigation.

### **Northern Trust Hackathon Project - 3rd Place of 15**

- Designed a comprehensive foreign exchange trading platform using React that integrates real-time currency conversion, trading simulation, and predictive analytics.
- Built an interactive interface with portfolio tracking, trade history, and real-time exchange rate data via API integration.
- Implemented an LSTM (Long Short-Term Memory) machine learning model to predict currency exchange rate trends and identify optimal trading opportunities. Data is visualized with Chart.js.

### **Stem Player iOS Application**

- Created an iOS app that takes YouTube links from users, processes the audio into 4 separate tracks ("stems"), and enables users to manipulate the separated tracks.
- Engineered synchronized multi-track playback using AVAudioPlayer for precise control of each isolated track.
- Constructed a background processing system with Flask microservice for audio stem separation using Demucs neural network, processing songs in ~1.5x song length.

## EXPERIENCE

**Self Employed**, Chicago, IL

January 2025 - Present

*iOS Developer*

- Developed and launched iOS applications using Swift, SwiftUI, and UIKit with SQLite database integration.
- Built full-stack solutions integrating Python/Flask backend services for audio processing and real-time data handling.
- Managed complete development cycle from design through App Store launch and distribution.

**Chicago River Canoe and Kayak**, Willow Springs, IL

*Boat Rental Associate*

May 2024 - July 2025

- Managed daily transactions, securely handling up to \$2,000 per shift.
- Assisted with boarding, provided safety guidance, and performed water rescues as needed

## ACTIVITIES

**DePaul Serbian Cultural Club**

January 2024 - Present

*President*

- Lead the planning and execution of cultural events, managing budgets and fundraising efforts to support community.

**DePaul Orthodox Christian Fellowship**

October 2022 – Present

*Member*

- Participate in community service projects, fostering group engagement and contributing to local charitable initiatives.

**DePaul Computer Science Society**

October 2022 – Present

*Member*

- Compete in software development hackathons and network with industry professionals at guest speaker events.