# Woody (Wancheng) Lin

781-363-5556 | lin.wancheng001@gmail.com | linkedin.com/in/woody-lin | github.com/WoodyLinwc

## EDUCATION

## University of Massachusetts Boston

Boston, MA

Bachelor of Computer Science, Minor in Mathematics, Major GPA: (3.72/4.0)

Sep. 2019 - Dec. 2023

Relevant Courses: Software Engineering, Database Management, Data Structures and Algorithms, Internetworking

# SKILLS

Languages: Java, Python, JavaScript, SQL, Swift, HTML & CSS, C/C++, Bash, Racket, R

Frameworks: Spring Boot, ReactJS, SwiftUI, Jekyll

Relevant Tools: MongoDB, Git, AWS, Node.js, Miniconda, MySQL, VS Code, Xcode

# Projects

 $LE-V-EL \mid \underline{GitHub}$ 

Feb. 2023 – May 2023

- Designed a dynamic website showcasing rankings of machine graphical perception algorithms on benchmark datasets using HTML, CSS, JavaScript, and Jekyll.
- Managed **Python** files using **Miniconda** to ensure smooth execution and mitigate conflicts on the server side.
- Leveraged GitHub Workflow to automate project processes directly within the GitHub repository.
- Implemented a robust lock mechanism based on YAML configuration file on the school server; prevented the risk of infinite loops and streamlined workflow efficiency during GitHub Action execution.
- Standardized the datasets and improved calculation speed by 40% on the school's server by employing scikit-learn (sklearn), numpy, and nltk for efficient data preprocessing and analysis tasks.

# Automated Twitter Bot | GitHub

May 2023 – Jun. 2023

- Developed a Twitter bot based on **AWS EC2** instance to select and upload pictures from a designated database once **every 6** hours (still operational remotely).
- Implemented a time-based **CronJob** to acquire the necessary components by **Node.js**; integrated the **Twitter API** for automated tweeting, optimizing efficiency with **async/await** for handling asynchronous tasks.
- Leveraged PM2 for real-time monitoring management of the Twitter bot, ensuring consistent performance.
- Published over 1,000 tweets to date and constantly gained followers.

#### Full-Stack Review Platform | GitHub

Oct. 2023 – Dec. 2023

- Crafted a song review application utilizing **Spring Boot** as the back end and **ReactJS** as the front end.
- Utilized **Axios** to fetch K-pop songs and review data from the back-end API in Spring Boot.
- Implemented a **RESTful API** with endpoints to facilitate **CRUD** operations on K-pop contents.
- Leveraged **MongoTemplate** to perform more complex **MongoDB** interactions, such as updating associated K-pop content documents with review IDs when a new review is created.
- Employed Lombok to generate boilerplate code, reducing verbosity in both "Kpop" and "Review" classes.
- Applied dependency injection with **@Autowired** annotations, automatically injecting instances into the "ReviewService" class when it's initialized.

### EXPERIENCE

#### Teaching Assistant

Feb. 2023 - Dec. 2023

University of Massachusetts Boston CS Department

Boston, MA

- CS420 Theory of Computation, Prof. Chang | CS310 Data structures and Algorithms, Prof. Ouyang
- Assisted professor in grading assignments and projects.
- Held office hours to help students with course material and homework assignments.
- Collaborated with fellow TAs to plan instructional activities.
- Communicated with students on Piazza, Blackboard, and via email.

#### Website Designer

Jul. 2023 – Aug. 2023

Financial Education for Families, Kelcy Ou | Freelancer

Braintree, MA

- Collaborated with another designer to create a successful personal portfolio website for a financial agent.
- Integrated Google Domains for website hosting and employed ReactJS to develop interactive user interfaces.
- Ensured website for optimal displaying across all devices.
- Received outstanding feedback from the client upon project completion.