

# Yunmu Shu

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## EDUCATION

<b>Northeastern University</b> <i>Master of Science in Computer Science (GPA: 4.0/4.0)</i>	Boston, MA <i>Sep. 2022 – May. 2025</i>
<b>Northeastern University</b> <i>Master of Science in Financial Mathematics</i>	Boston, MA <i>Sep. 2021 – Aug. 2022</i>
<b>Guangdong University of Foreign Studies</b> <i>Bachelor of Science in Economics</i>	Guangzhou, Guangdong <i>Sep. 2017 – Jun. 2021</i>

## EXPERIENCE

<b>Software Developer Intern</b> <i>Dassault Systèmes</i>	Feb. 2024 – Jun. 2024 <i>Waltham, MA</i>
<ul style="list-style-type: none"><li>Assisted the development of quality document control solutions, delivering tailored document management systems to clients compliant with diverse regulatory standards</li><li>Leveraged Java <b>Servlet</b> to architect endpoints in NuoDB by MQL for robust data operations, implementing caching strategies to reduce latency by 55% and minimize excessive database requests</li><li>Utilized <b>React.js</b> and internal WebUI components for rendering document data to enhance smooth user experience</li><li>Developed programs using WinSCP in <b>Linux</b> environment to convert file category configurations from up to 7 different languages to JSON format for the Controlled Document Management component</li></ul>	
<b>Software Developer Intern</b> <i>Rapid Micro Biosystemes(NASDAQ: RPID)</i>	Jun. 2024 – Aug. 2024 <i>Lexington, MA</i>
<ul style="list-style-type: none"><li>Developed new features for applications in Computer Vision and Image Processing to detect microbial growth</li><li>Utilized <b>PHP</b> to develop backend endpoints designed based on database indexing to reduce latency by <b>20%</b></li><li>Configured <b>Apache</b> server for local and production environments, ensuring smooth transitions</li><li>Migrated <b>MySQL</b> data from the server to the local environment to improve development efficiency</li><li>Performed cassette data extraction, alignment, and benchmarking error analysis using a Python script</li></ul>	
<b>Software Developer Intern</b> <i>Tatfook Technology Co., Ltd</i>	May. 2023 – Aug. 2023
<ul style="list-style-type: none"><li>Collaborated with backend developers to develop <b>RESTful</b> APIs using <b>Koa2</b> and <b>TypeORM</b> for efficient management of plant observation data, leveraging factory patterns to cohesively generate objects</li><li>Boosted user feedback by <b>60%</b> through the implementation of a reporting dashboard with an integrated Modal using <b>Next.js</b> for its server-side rendering and <b>Axios</b></li><li>Conducted API testing using <b>Postman</b> to validate functionality and improve code test coverage of different endpoints.</li><li>Implemented CI/CD pipelines utilizing <b>GitLab</b> for code uploads and <b>Jenkins</b> for seamless deployment</li></ul>	

## PROJECTS

<b>Husky Town</b>	Oct. 2023 – Dec. 2023
<ul style="list-style-type: none"><li>Collaborated with team members to develop a pixel-based game in <b>Dlang</b> featuring real-time chat functionality and player render for multiple user based on <b>DUB</b> to manage project</li><li>Designed both client and server-side TCP communication modules using <b>Socket</b> programming techniques</li><li>Integrated multi-threading for efficient game rendering and chat to further enhance performance and interactivity</li><li>Implemented packet serialization to increase packet capacity by <b>40%</b>, resulting in smoother character rendering</li></ul>	
<b>GeeCache</b>	Jun. 2024 – Jul. 2024
<ul style="list-style-type: none"><li>Implemented a distributed caching system by developing both local cache and HTTP-based distributed cache, supporting <b>Least Recently Used</b> caching strategy in GoLang</li><li>Utilized Mutex Lock to prevent cache stampedes and ensure data integrity</li><li>Integrated consistent hashing to select nodes, ensuring load balancing and efficient cache distribution</li><li>Optimized inter-node communication using <b>protobuf</b> for efficient binary data exchange</li></ul>	
<b>Campus Stray Animal Monitor</b>	Jan. 2023 – Feb. 2023
<ul style="list-style-type: none"><li>Employed <b>SpringBoot3</b> and <b>Hibernate</b> to proficiently map data into objects, streamlining data operations by 34%</li><li>Leveraged <b>React.js</b> and implemented <b>useContext</b> to develop a single-page application, reducing page reloads and improving user interaction speed by 35%</li><li>Validated user credentials and generated <b>JWT</b> tokens, providing service for users with different permissions</li></ul>	

## TECHNICAL SKILLS

<b>Programming Languages:</b>	Java, C/C++, JavaScript, TypeScript, Go, SQL, Python
<b>Frameworks:</b>	Springboot, React, Next.js, Express.js, Node.js, Axios
<b>Databases:</b>	MySQL, Hibernate, JPA, PostgreSQL, Redis, MongoDB
<b>Tools:</b>	AWS, Docker, Linux, Postman, Nginx, Git, JUnit, Maven