

Yunmu Shu

857-334-3706 | bobbyshu0824@gmail.com | [linkedin.com/in/bobbyshu](https://www.linkedin.com/in/bobbyshu) | github.com/Bobbyshu | bobbyshu.netlify.app

EDUCATION

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

EXPERIENCE

Software Developer Intern <i>Dassault Systèmes</i> <ul style="list-style-type: none">Assisted the development of quality document control solutions, delivering tailored document management systems to clients compliant with diverse regulatory standardsLeveraged Java Servlet to architect endpoints in NuoDB by MQL for robust data operations, implementing caching strategies to reduce latency by 55% and minimize excessive database requestsUtilized React.js and internal WebUI components for rendering document data to enhance smooth user experienceDeveloped programs using WinSCP in Linux environment to convert file category configurations from up to 7 different languages to JSON format for the Controlled Document Management component	Feb. 2024 – Jun. 2024 Waltham, MA
Software Developer Intern <i>Rapid Micro Biosystemes(NASDAQ: RPID)</i> <ul style="list-style-type: none">Proposed and discussed different database schema update options with team members, finalizing a solution to enhance scalability and performance by adding over 10 fieldsRefactored legacy PHP code by introducing object-oriented principles, increasing maintainability and readabilityConfigured Apache server for local and production environments, ensuring smooth transitionsMigrated MySQL data from the server to the local environment to improve development efficiencyPerformed cassette data extraction, alignment, and benchmarking error analysis using a Python script	Jun. 2024 – Aug. 2024 Lexington, MA
Software Developer Intern <i>Tatfook Technology Co., Ltd</i> <ul style="list-style-type: none">Collaborated with backend developers to develop RESTful APIs using Koa2 and TypeORM for efficient management of plant observation data, leveraging factory patterns to cohesively generate objectsBoosted user feedback by 60% through the implementation of a reporting dashboard with an integrated Modal using Next.js for its server-side rendering and AxiosConducted API testing using Postman to validate functionality and improve code test coverage of different endpoints.Implemented CI/CD pipelines utilizing GitLab for code uploads and Jenkins for seamless deployment	May. 2023 – Aug. 2023

PROJECTS

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

TECHNICAL SKILLS

Programming Languages:	Java, C/C++, JavaScript, TypeScript, Ruby, Go, SQL, Python
Frameworks:	Springboot, React, Next.js, Express.js, Node.js, Django, Rails
Databases:	MySQL, Redis, MongoDB, PostgreSQL, DynamoDB, Hibernate
Tools:	AWS, Docker, Linux, Postman, Nginx, Git, JUnit, Maven, Log4j