(Alan)Houming Leng

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Education

Northeastern University, Seattle, WA

M.S. Computer Science (GPA: 4.00/4.00)   (01/2021-12/2023)
Relevant Coursework: Java Programing ,Computer system, Algorithm, Database, Object-oriented Design, Web Development, Python Programming, Discrete Mathematics, Database Management System, System design, Distributed System
Case Western Reserve University , Cleveland, OH

M.S. Chemistry   (2017-2019)

Characterization

Programing Language: Java ,Python, C++, JavaScript, TypeScript, HTML, CSS, SQL
Frame/Tools: Jquery,Node.js, React.js (Hook, Redux), Bootstrap, NodeJS, SpringMVC, GitHub, Shell, SpringBoot, Redis,Jira *Cloud Database/Others*: MySQL, MongoDB, Git, Heroku, AWS

Working Experience

Amazon Web Service. (Software Development Engineer Intern.)   Boston, MA 05/2023 - 08/2023

- Developed the GDPR Service using **Kotlin** and **TypeScript**, contributing to increased customer engagement by delivering innovative solutions for the group's services.
- Proficiently harnessed AWS tools such as **DynamoDB**, **SQS**, **SNS**, **Lambda**, **CloudWatch**, **S3**, and **Step Functions**. This mastery enabled the establishment of a robust multi-region deployment strategy, streamlined disaster recovery, and implemented effective error management mechanisms.
- Spearheaded innovation through the creation of three independent Cloud Development Kits (**CDKs**) and the design of seven **APIs**. By decoupling modules, these initiatives expedited the development process and bolstered integration testing, promoting a culture of agility and innovation.
- Ensured the reliability and stability of the developed solutions by constructing an expansive suite of integrated tests. These tests spanned diverse regions and developmental phases, validating the service's performance and functionality under real-world conditions.
- Demonstrated a meticulous approach to quality assurance, achieving a 95% code coverage through **JUnit** and **Mockito** unit tests. Additionally, orchestrated end-to-end tests that mirrored real-world scenarios, ensuring the comprehensive validation of the software.

WalletGyde inc. (Full-stack/Java Intern.)   Denver, CO 08/2022 - 12/2022

- Developing front end website architecture. Designing user interactions on web pages. Developing back end website applications. Creating servers and databases for functionality.
- Ensuring cross-platform optimization for mobile phones. Ensuring responsiveness of applications. Working alongside graphic designers for web design features.
- Seeing through a project from conception to finished product. Designing and developing APIs. Meeting both technical and consumer needs.Staying abreast of developments in web applications and programming languages.

Stealth inc. (Full-stack/Java Intern.)   Irvine, CA 05/2022-08/2022

- Created cloud-native translation app, Used **Node.JS** and **Google Cloud APIs/functions.** Used **Jira** to keep track of tasks assigned to me and to create tasks.
- Hands on software development(Java), create frameworks, use third party frameworks, code reviews in a team.
- Work closely with team lead or group manager, Work in an Agile oriented environment
- Develop unite tests, integration test and satisfy ongoing software quality.

Project Experience

Discord Oder Dish Bot(Full-stack/Java)   01/2022-04/2022

- Developed a software bot for restaurant booking, based on discord environment by Java. Key features include creating accounts, listing available restaurants, and ordering and checking out dishes/order status.
- Constructed the database with MongoDB. Utilized Fly.io to connect and discord code and MongoDB.
- Fully tested all code through JUnit.

[Job Search Web](#)(Full-stack/React.js, Node.js, MongoDB)   11/2021 - 12/2021

- Engineered a full-stack Online website for job posting with multiple features allowing users to create free accounts, login/logout, post & update jobs, search using keywords, and manage preferred jobs.
- Created frontend code in React.js and backend code by Node.js (Express.js). Established database with MongoDB and RESTful APIs to retain jobs/users' data. Executed verifications and authorization for security.
- Utilized responsive design approach to website designing. Optimized interface using BootStrap/CSS.

SeattlerHub(Java, MySQL)   10/2021 - 12/2021

- Devised a data-driven housing recommendation application SeattleHub in a team collaboration. Facilitated users with a platform allowing users to support personalized housing searches, give feedback, and make comments.
- Updated and maintained data of over 350k housing in the database. Stored and maintained data accessible through MySQL.
- Stored and maintained data accessible through MySQL. Exploited JSP/Servlet to build a dynamic web application and JDBC for data access/SQL queries execution.

Flash Selling System(Java, SpringBoot)   05/2022-12/2022

- Design a system for user shopping. This system is designed to have features: account creation ,and delete. Also with features for products' add, update, display, etc. A specific feature, flash sell, that a specific product with a base price begin to bid combined with 10 seconds countdown, when a different user begin to bid with a higher price, new 10 seconds countdown. High concurrent feature that allowed Million users at same time.
- Introduced a specific feature flash sell enabling millions of users to make bids simultaneously with a 10-second counter stating a base price.
- Deployed Thymeleaf, bootstrap, jQuery for front-end, SpringBoot, MyBaitsPlus for back-end tech, RabbitMQ, Redis