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EDUCATION

Northeastern University | **Seattle, WA**
Master of Science in Computer Science
September 2021 - May 2023

University of Nebraska-Lincoln | **Lincoln, NE**
Bachelor of Science in Computer Science
August 2017 - August 2021
GPA: 3.97 / 4.00

SKILLS

Frontend:	Material-UI, React / React Native, React Redux	**Backend:**	Node.js, SpringBoot, MyBatis, Hibernate
Language:	Java, JavaScript, Python, C	**Software / Cloud:**	Travis CI, AWS Elastic Beanstalk, Docker

RELATED PROJECTS

Senior Capstone Project: AI-based Food Image Processing *(Cross-Platform Mobile Application)*   August 2020 - August 2021
JavaScript, React Native, Firebase, Node.js, MySQL, AWS Elastic Beanstalk   [Demo]

- Led a team of 5 students to prototype an **Android / iOS** App with **React Native** integrated with **image processing** algorithms to analyze nutrition information identifying unhealthy habits and deliver results through social media.
- Built a backend with **Express.js** to provide real-time diet assessment by querying nutrition data from **USDA FoodData Central** API and weight monitoring through Bluetooth devices.
- Reduced 35% startup time by migrated 40 GB of food ingredients data stored on local disk to remote **Amazon RDS** database.
- Deployed the backend through **AWS infrastructures (Elastic Beanstalk, Cloud Formation, RDS)** to interact with users to access unlimited nutritious recipes effortlessly based on the smartphone-captured context.
- Practiced **Agile** methodology to create, design, iterate and test 6 releases towards the final product and end user delivery.
- Drove weekly meetings by synthesizing product artifacts, preparing trade-off analysis and troubleshooting production problems across **Android / iOS** platforms.

Rouge *(Java Web MVC Application)*   April 2020 - July 2021
Java, SpringBoot, MyBatis, Bootstrap, JUnit, HTML5 / CSS3 / JavaScript

- Created **responsive** web UI with **Bootstrap**, **JavaScript**, **HTML5**, and **CSS3** to offer a positive and efficient note-taking experience.
- Built an **OAuth 2.0** authentication pipeline to automate auth state persistence to effectively reduce multiple logins for the same user.
- Performed **CRUD** data operations on remote **MySQL** database through **MyBatis** framework, **Spring JDBC**, and **SQL** queries.
- Practiced 100% code coverage using **JUnit** framework to diagnose and fix critical defects by applying **Test-Driven Development**.
- Conducted **Spring Framework (Core, Security, IOC)** to design API Gateway and create high cohesion modules to build **Microservices** components.
- Implemented 3 design patterns **(MVC, Strategy, Observer)** with **object-oriented programming** concepts to decompose backend into loosely coupled modules (services, data models, third-party APIs).

ProductInSight *(JavaScript Full Stack Application)*   January 2020 - May 2020
JavaScript, React, Ant Design, MongoDB, Gson, Express, Docker, Chart.js

- Defined **RESTful** APIs handling client-side requests to fetch data from **MongoDB** database and return responses in **JSON** format.
- Rendered user interface with **React / Redux** and **Ant Design UI components** to monitor daily active users and transactions.

WORK EXPERIENCE

UNL SBBI LAB   August 2020 - August 2021
Research Assistant

- Optimized **Docker** images building process with third-party data sources by minimizing 10% in image size and build time.
- Led a team of 5 students to analyze calories by synchronizing with **Fitbit** devices periodically through scheduled background tasks.
- Formulated a research problem by scheduling architectural concepts and algorithms tradeoffs with 8 multidisciplinary specialists daily.

New Student Enrollment   April 2018 - May 2019
International Orientation Leader

- Executed LGBTQIA+ events for 100 - 150 new students by the NSE Department by collaborating in a diverse team with 50 colleagues.
- Organized first-generation college sessions independently for over 100 students and parents by delivering inspirational information.