

# Hyunju Song

520-461-6050 | songsarah9785@gmail.com | <https://www.linkedin.com/in/hyunjussong/> | [github.com/hyunssong](https://github.com/hyunssong)

1+ year Full-Stack Software Engineer | Machine Learning (NLP) Developer

## EDUCATION

<b>University of Arizona</b> <i>Master of Computer Science</i>	Tucson, AZ May 2024
<b>University of Arizona</b> <i>Bachelor of Computer Science</i>	Tucson, AZ May 2022

## WORK EXPERIENCE

<b>Software Engineer</b> <i>Nomura Securities International, Inc.</i>	June 2024 - Present New York, NY
<ul style="list-style-type: none"><li>Developed regulatory control solutions using <b>Spring</b> and <b>Angular</b>.</li><li>Designed and deployed scalable microservices, utilizing <b>Docker</b>, <b>Kubernetes</b> and <b>Ansible</b> for infrastructure automation.</li><li>Built a knowledge-based RAG chatbot to automate production support, leveraging <b>Langchain</b>, <b>FastAPI</b> and <b>Angular</b>.</li><li>Modernized infrastructure by introducing <b>Apache Pulsar</b>, reducing operational costs by over 66%.</li></ul>	
<b>Software Engineer Intern</b> <i>Nomura Securities International, Inc.</i>	June 2023 - Aug 2023 New York, NY
<ul style="list-style-type: none"><li>Implemented a backtesting application with <b>Spring Boot</b> and <b>Elasticsearch</b> for processing XML trade data.</li><li>Utilized multithreading to improve the processing time by 48%.</li></ul>	
<b>Research Assistant</b> <i>University of Arizona</i>	May 2023 - May 2024 Tucson, AZ
<ul style="list-style-type: none"><li>Integrated LLMs into the <b>FastAPI</b> backend to improve the metadata quality of 78% of the scholarly documents.</li><li>Created user interface of search and discovery website using <b>React</b>.</li><li>Developed named entity recognition models using <b>Tensorflow</b> and <b>PyTorch</b> and improved the baseline performance by 12%.</li></ul>	

## TECHNICAL SKILLS

**Programming Languages:** Java, Python, Javascript, TypeScript, C, SQL

**Technologies:** Spring, Spring Boot, FastAPI, Django, Node.js, Kafka, Pulsar, Jenkins, Gitlab CI, Docker, Kubernetes, AWS, Git, Ansible, Postgres, MongoDB, Tensorflow, Keras, PyTorch, React, Angular, HTML, CSS

## PROJECTS

### MooDay

- Created a web app that recommends music based on user daily post using **FastAPI** and **React**.
- Implemented a text-based sentiment analysis model using **PyTorch** and integrated this to deployment using **Docker**.

### TotalVery

- Built a web app using **Django**, **React**, and **MongoDB** that compares the estimated price of most-used food delivery platforms and offers the best deal given the user's location and expected price range.
- Awarded the Best Use of Google Cloud Award in the Major League Hackathon under the theme Social Good.