

TECHNICAL & SOFT SKILLS

Programming Languages: Python, R, SQL, scikit-learn, TensorFlow, Pytorch, Java, NoSQL, JavaScript, PHP, Kotlin, React

Frameworks: LangChain, Streamlit, Linux, Unix, Spring, Selenium | **DB:** DynamoDB, IBM DB2, Maria DB, Oracle DB

Tools: Spark, Bedrock, Gemini API, Jenkins, OpenShift, AWS EC2, Tableau, IBM SPSS, SAS, Confluence, Git, Redis, Docker

Soft Skills: Team Player, Fast Learner, Effective troubleshooter, Leadership experience, Collaborator

Certificates:

- Engineer Information Processing Certification, Human Resources Development Service of Korea
- SQL Developer Certificate, Korea Data Agency | Microsoft Office Excel Expert, Microsoft

EDUCATION

UNIVERSITY OF WASHINGTON

Seattle, WA, United States

M.S in Data Science | GPA: 3.91 / 4.0

Sep 2023 - Mar 2025

Course : ML for Big Data, Statistical ML, Applied Statistics, Deep Learning, Data Visualization, Software Design

KOOKMIN UNIVERSITY

Seoul, Korea

B.S. in Information Management | GPA: 3.86 / 4.0 | Dean's Distinguished Scholar

Mar 2016 - Aug 2019

WORK EXPERIENCES

Software Engineer in Test Intern, Amazon (June 2024 - Aug 2024)

Seattle, WA, United States

- Developed a Generative AI Powered QA Automation Status Dashboard using Python, Streamlit, LangChain, Bedrock API, DynamoDB, and Lambda, effectively reducing workload by 72 hours
- Analyzed dynamic dashboard data for time series data analysis with knowledge base and vector database OpenSearch for RAG
- Orchestrated testing projects and automated testing scripts for 250 test cases using Java and Selenium

Software Engineer, KB Kookmin Bank (July 2020 - Sep 2023)

Seoul, Korea

- Accomplished successful global banking integration for 9 different countries from IBM mainframe to a 12 microservice-based architecture using Agile and DevOps practices
- Built transfer, QR Payment, transaction history feature for mobile/desktop applications, increasing Monthly Active Users (MAU) by 30% with Vue.js, Java, SpringBoot, DB2
- Applied DevOps process and reduced product release time and cost by 50% using Jenkins CI/CD, Jira, Confluence, Bitbucket

Software Engineer Intern, NutraGroup, Inc (Apr 2019 - Jan 2020)

San Francisco, CA, United States

- Developed a web crawler to collect Amazon product and seller data, analyzing the results for time-series forecasting.
- Increased monthly company profits by 10% using Python (Beautiful Soup), PHP, JavaScript, jQuery, MySQL
- Built a RESTful API to reassess vendor products using APIs for data tracking, utilizing Laravel MVC, PHP, JavaScript, AWS

Software Engineer Researcher, Korea National Rehabilitation Research Institute (Oct 2018 - Jan 2019)

Seoul, Korea

- Developed dashboard and algorithm to help 2,000 people with disabilities navigate health decisions such as exercise and diet plan, depending on disabilities using PHP, JavaScript, MySQL

RELEVANT ACTIVITIES & PROJECTS

Project of Software Design, University of Washington

Winter 2024

- Engineered a dynamic website for YouTube content analysis, recommendation, and chat-bot using Python and Streamlit
- Deployed LLMs for real-time content recommendations and a context-aware chatbot using YouTube, Gemini API, Langchain

Project of Data Visualization, University of Washington

Fall 2023

- Analyzed and visualized YouTube Trending Video data to enhance exposure and clickbait using Python, Tableau
- Employed Python NLTK for word cloud, removing stopwords and implementing lemmatization

1st Place of MSDS Hackathon, University of Washington

Spring 2024

- Predicted date and time for a graduation photoshoot, ensuring Mt. Rainier visibility and peak cherry blossoms
- Utilized historical weather data, Twitter visibility predictions, and DC Cherry Blossom data correlations

Project of Machine Learning for Big Data, University of Washington

Spring 2024

- Implemented HDBSCAN to identify and analyze Seattle crime hotspots, including cluster movement and statistical tests
- Led cluster post-processing, characterization, and points of interest analysis using Python Plotly, Tableau, OpenStreetMap API

Project of Applied Statistics, University of Washington

Winter 2024

- Analyzed telecom subscription churn rates to uncover key factors influencing customer retention
- Employed Python and R to conduct ANOVA, t-test, chi-square test to investigate churn predictors and relationships