Minseok Oh

Cupertino, CA | 408-334-5898 | ohmseok0524@gmail.com | Portfolio | LinkedIn

- Led strategic product analytics initiatives to optimize user behavior insights and drive retention strategies
- Architected and optimized data models, data warehouses, and ETL pipelines to enable scalable BI solution
- MS in Information Systems(AI/ML) candidate at Santa Clara University (Expected June 2025)
- 10 years experience at ORACLE & LG, specializing in recommendations, segmentation, churn, and fault detection

WORK EXPERIENCE

FOLLOZE | San Mateo, CA   Jan. 2024 – June. 2024
Data Science Intern

- **Enhanced sales forecasting** and customer acquisition strategies by developing a **hybrid XGBoost ensemble model** tailored to company size variations, leveraging key financial and demographic features with **SMOTE**, and achieving high **recall** and **F-beta** scores
- Designed Tableau dashboards to monitor high-impact features, ensuring interpretability and data-driven decision-making
- **Skills used**: Classification, Ensemble, Sampling, Web crawl, NLP, ETL, Tableau

ORACLE | Seoul, South Korea   May. 2019 – July. 2023
Principal Consultant(L5) - AI/ML & Data platform

- Increased **monthly revenue by $50K** with a **4.5% sales boost** through A/B testing by developing a store-specific product recommendation system for offline retail. Leveraged Matrix Factorization with re-ranking, enhanced efficiency with **FAISS** for fast similarity search, and applied a **Bloom filter** to exclude sold items.
- Reported **weekly predictions** by developing a customer churn model, prioritizing **churn probability** over user lifetime estimation. Applied **advanced feature engineering** to capture underlying patterns, adding 20+ high-impact features through derived features, arithmetic interactions, and statistical transformations.
- Streamlined regional inventory and production scheduling by enhancing demand **forecasting accuracy by 30%** for a $300M product line through **advanced time series modeling**, incorporating **seasonal decomposition**, trend analysis, autocorrelation, and **differencing.**
- Architected and optimized data models, data warehouses, and ETL pipelines to enable scalable BI solutions
- **Skills used**: Recommendation systems, Time-series analysis, Demand forecasting, Churn predictions, ETL, Data modeling, Data warehousing, Cloud computing, Experimental design, A/B testing, Visualization.

LG Display | Seoul, South Korea   Jan. 2013 – May. 2019
Data Scientist

- Report **daily news sentiment** to the IR team for **proactive risk management** by implementing **ElasticNet** regression (Applying **L1/L2 penalties** to balance feature sparsity and generalization), processing **400+ daily articles** through an **automated web scraping** pipeline.
- **Reduced downtime** by **20%** and **lowered the annual defect rate** by **0.1%** through a **fault detection system**, enabling **proactive maintenance** by continuously monitoring machine conditions.

PROJECTS

Data Research Lab, KAIST | South Korea   Sep. 2016 – Jan. 2019
Data Scientist/Analyst (Product/Marketing analytics projects with startup companies)

- **Optimized budget allocation** by analyzing **CTR** and **CVR** across ad channels, validating impact through **A/B testing** and statistical analysis, leading to a **refined marketing strategy** and a **12% increase in CTR.**
- **Refined lecture content and ad strategy** by analyzing **survey insights and purchase data**, validating impact through **A/B testing**, leading to higher engagement and **3.4% increase in CVR.**
- Increased **CTR by 20% and CVR by 4.6%** through a **re-ranking Matrix Factorization** model, applying **negative sampling** to handle implicit feedback, leveraging **FAISS** for fast retrieval and **Bloom Filter** for efficient filtering.
- Lead the funnel analysis project to decrease **cart abandonment rates** by **8%**, including launching **A/B tests** and implementing **promotion banners and offers**.
- **Skill used:** Experimental design, A/B testing, Statistical analysis, Product analytics, Marketing analytics, Recommendation systems

Santa Clara University | Santa Clara, CA   Sep. 2023 – June. 2025
- **Financial QA & Sentiment Analysis chatbot**
  - Developed a **financial news analysis chatbot** with Streamlit UI, integrating **fine-tuned QA** (Phi-2) and **sentiment analysis** (RoBERTa) models, enabling users to extract actionable insights and make informed financial decisions efficiently.
- **Movie recommendation engine with GraphSage model and similarity search**
  - Engineered movie recommendation engine leveraging graph neural networks (GraphSage) and efficient similarity search (Annoy)

SKILLS

Programming Language| Python, SQL   **Visualization**| Tableau, PowerBI, Matplotlib, Seaborn
Data Science & Analytics| Statistical Analysis, A/B Testing, Experimental Design
Machine Learning & AI| Recommendation Systems, NLP, Time Series Forecasting, Deep Learning
Data Engineering| Data Pipelines, Data Modeling, Data Warehousing, Spark, Web Crawling, ETL
Cloud & Infrastructure| Oracle Cloud (OCI), AWS, GCP, Snowflake, Databricks

EDUCATION

Santa Clara University / Santa Clara, CA   June. 2025
MS in Information Systems

KAIST (Korea Advanced Institute of Science Technology) / Seoul, South Korea   Feb. 2019
MS in Information Management

Dongguk University / Seoul, South Korea   Feb. 2013
BS in Electronic Engineering

Publication

Research at KAIST (Advisor: Jaehyeon An)   2019
Expected Values on the Continuous Intention to Use IoT Products from the Perspective of Expectation-Confirmation Theory [PDF[9]] *Published in the Journal of the Korean Operations Research and Management Science Society
    - PLS-SEM and Bootstrap analysis were used to validate relationships and evaluate model significance.
    - Tailored business strategies are needed based on income, household size, and region

Certificates

Oracle Cloud Platform Enterprise Analytics Professional
Oracle Autonomous Database Cloud Specialist
Oracle Cloud Infrastructure Architect Professional
Oracle Cloud Infrastructure Foundation Associate
Oracle Cloud Infrastructure Architect Associate