# ATSUHITO (ALEX) KITA

New York, NY

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#### **EDUCATION**

Columbia University

New York, NY

Master of Science in Data Science

Sep 2021 - Dec 2022

JASSO scholarship recipient sponsored by the Japanese government. GPA 3.58.

Relevant course work: Computer Vision (CV), Applied Machine Learning, Theoretical Machine Learning, Computer Systems, Statistical Inference, and Data Visualization.

Oregon State University

Corvallis, OR

Sep 2018 - Jun 2021

Bachelor of Science in Computer Science

Summa Cum Laude. GPA 3.99.

Relevant course work: Machine Learning and Data Mining, Database Management System, Mathematical Statistics, Operating Systems, and Analysis of Algorithms.

**SKILLS** 

**Programming** Python, JavaScript, SQL, R, TypeScript, Java, Kotlin, C++, Shell, CUDA.

Python Libraries NumPy, Pandas, Scikit-learn, Matplotlib, Seaborn, Keras, TensorFlow, PyTorch, OpenCV.

**Frameworks** Spring Boot, React.js, Redux, Next.js, Tailwind CSS, ggplot2, dplyr, D3.js.

**Databases** MySQL, Redis, MongoDB, Firebase.

Platforms AWS, Google Cloud Platform, Airflow, Kubernetes, Docker, Heroku, Vercel, GraphCMS, Git, GitHub.

# WORK EXPERIENCE

#### Natural Language Processing (NLP) Lab at Oregon State University

Corvallis, OR

Undergraduate Research Assistant

Jun 2020 - Dec 2020

- Co-authored an NLP research paper with Baidu USA accepted by a top NLP conference (EMNLP 2021).
- Conducted simultaneous translation Transformer model training with Baidu's PaddlePaddle Deep Learning framework.
- Preprocessed corpus datasets with NLTK and Byte Pair Encoding for reducing vocabulary sizes.
- Improved BLEU scores by 6.5% and 3.1% on Chinese-English and Japanese-English translation respectively.

## SmartNews International, Inc.

Software Engineer Intern

San Francisco, CA (Remote)

Jun 2022 – Aug 2022

- Built a movie recommendation system that leverages Sentence Transformer encoding based on a pre-trained BERT model.
- Constructed an end-to-end batch-processing recommendation system with Airflow, Hive, S3, Presto, and Python.
- Reduced API costs by 90% which is \$100K per month by optimizing the backend system with Redis cache for location data.
- Implemented an API monitoring board on Datadog with Micrometer written in Kotlin on Spring Boot.

Rakuten Inc.

Osaka, Japan

Jan 2020 - Mar 2020

Software Engineer Intern
Created reservation and review functions of a new service, Rakuten Carwash, in an agile manner.

- Implemented 5000+ lines of production codes in Java and SQL and test codes in Groovy using Spring Boot and Docker.
- Built an internal data management app with microservice architecture for the marketing department, decreasing data processing time by 60%, written in React.js + Redux and Kotlin.

# RELEVANT PROJECTS

#### Drug Recommender System using LDA and Review Analysis

Dec 2021

- Developed a drug recommender system based on drug reviews data posted by users facing similar condition.
- Predicted rating from reviews available from the UCI Dataset leveraging CNN to get test set accuracy of 84%.
- Built an LDA model from WebMD dataset to create user and drug embeddings to formulate ranking matrix.
- Combined similarity score of test user with predicted ratings from WebMD review feature to get top 10 drug recommendations.

### Columbia Venture Community (CVC) - Official Website (Link)

Sep 2021 – Present

Lead Engineer

- Developed a website from scratch where community members can post events and members in Next.js, GraphQL, GraphCMS.
- Managing infrastructure from domain service to email service to deployment environment.

# Startup Project: Online Marketplace for Mentoring (GitHub)

Sep 2020 - Jun 2021

Project Leader and Full Stack Developer

- Initiated a business plan and developed the web app where people can get mentored by real industry experts in real-time.
- Recruited three developers by proposing the business plan to College of Engineering at OSU as a capstone project.
- Created web application from scratch by using Next.js, Typescript, GraphQL, and MySQL.
- Executed back-end development from data modeling to deployments.