# SANGJUN SON

# @aslan, @lucetre

#### INTRODUCTION

Site Reliability Engineer at Moloco. Adept in engineering (Backend & DevOps) and business development, with a keen interest in exploring emerging technologies and actively engaging in discussions with others.

## WORKING EXPERIENCES

## Site Reliability Engineer, MOLOCO, Engineering

Jul. 2022 - Now

- Prod CD Migration from Harness to Jenkins: Successfully migrated CD to Jenkins for multiple products and microservices, addressing issues with Harness licensing policy. Critical work in handling an irrational compliance request from Harness, resulting in them retracting their request and acknowledging mistakes. Showcased reliability with 187 DSP runs and 87 on JIO during 2023 Q4.
- Automated Release Note Publication: Spearheaded the proposal and implementation of an automated system for heightened CI/CD transparency, including auto-generated release notes tailored to the major mono-repo, resulting in the successful generation of 783 releases in 2023 Q4. Collaborated with the Cloud FE team to develop a dashboard page for development tools, including go/release-note-explorer.
- Enhanced Security and Efficiency in Containerized Environments: Achieved an 80% decrease in Docker image vulnerabilities, a 94% reduction in misconfigurations, and zero instances of secret exposures through Trivy analysis and Datadog monitoring, while significantly enhancing deployment speed with 5.20x lighter images, leading to a 4.96x reduction in pod pulling time; additionally, successfully migrated to Google Artifact Registry for all microservices, resulting in a 75% reduction in storage network egress fees and faster rollout times.

#### Software Engineer Intern, NFTBank, Backend Team

Dec. 2021 - Feb. 2022

 Scholar Resume for Axie Infinity: Created a single-page application (Scholar Resume) for Axie Infinity scholarship applicants, showcasing scholars' game career, including ranks, MMR, and earned SLP history. Integrated an automated payout service, streamlining the distribution of earned SLP rewards to players within each scholarship program.

Google Software Engineering Intern, Google Korea LLC., Desktop Search Team Jun. 2021 - Sep. 2021

• Automatic I2F and nesting config generation for hOSRP to diOSRP conversion: Designed an internal tool for efficient development in OSRP migration during 2021 Q3.

## **PUBLICATIONS**

"DAO-CP: Data-adaptive online CP decomposition,"  $PLOS\ ONE\ 2022,$ 

Sangjun Son\*, Yongchan Park\*, Minyong Cho, and U Kang

"Gtensor: Fast and Accurate Tensor Analysis System using GPUs," CIKM 2020,

29th ACM International Conference on Information and Knowledge Management, Virtual Event, Ireland, Dawon Ahn, Sangjun Son, and U Kang

## **EDUCATION**

Seoul National University, Seoul, Republic of Korea

B.S. in Computer Science and Engineering

Interdisciplinary Major in Entrepreneurship

Mar. 2016 - Aug. 2022

# RESEARCH EXPERIENCES

**Data Mining Laboratory**, Seoul National University Undergraduate Research Internship (Advisor: Prof. U Kang) Nov. 2019 - Feb. 2021

- **BIGtensor** (**Gtensor**): Accelerated large-scale tensor analysis on heterogeneous systems by developing and releasing Tensor mining packages, utilizing GPU and Hadoop computation for efficient processing of big-sized tensor data.
- DAO-CP: Enhanced accuracy for CP decomposition of time-evolving tensors by a data-adaptive algorithm.

 ${\bf Real\text{-}Time\ Ubiquitous\ Systems\ Laboratory},\ \textit{Seoul\ National\ University}$ 

Jul. 2017 - Feb. 2018

Undergraduate Research Internship (Advisor: Prof. Chang-Gun Lee)

• Drone Transfer Simulator: Implemented simulation to study effects of AED delivery using unmanned vehicle transport technology on defibrillation in out-of-hospital cardiac arrest.

#### TEACHING EXPERIENCES

International Students Integrated Peer Tutoring Program, Undergraduate Student Tutor Spring. 2021 Data Structures & Algorithm Fundamentals, SNU Gwanak Residence Halls

# Digital Computer Concept and Practice, Lab Class Lecturer

Fall. 2020

Introduction to Python and Its Application, Dept. of Computer Science and Engineering

 ${\bf Basic\ Calculus\ 1},\ {\it Undergraduate\ Student\ Tutor}$ 

Spring. 2020

TA Office of the Department of Mathematical Sciences

# SOFTWARE and PROJECTS

LinkedArt, College of Art Exhibition Archive Platform

Spring. 2022

Created an artwork sales channel between buyers and artists and provided a networking community of college of art undergraduate/graduate students to build their careers.

Operated Next.js and NestJS for front-end and back-end frameworks with PostgreSQL DB as a full-stack engineer. Built an automated deployment pipeline via Vercel and Heroku cloud application platforms.

Seoul Bike Transit, Spatial Geography Information Research using qGIS

Spring. 2022

Analyzed validity and efficiency of public transportation system w/ Seoul public bicycle service Ttareungyi.

Defined standards of a good route in safety, time, distance, exercise, cost, and transit counts.

Visualized *Ttareungyi* routes compared to those only using public transport via a live demo.

MopReM: Moiré Pattern Removal for Mobile, Texts/Diagrams on Single-colored Background Fall. 2021 Established a efficient module for mobile cameras specialized in demoiring re-captured screen materials.

## Deep Learning-based Wrinkle Detection, Morpheus3D

Fall. 2020

Built new models to segment wrinkle parts in 3D scanned face images by exploiting state-of-the-art methods.

**ABC**, Art with Block-Chain: Media-art Platform

Spring. 2020

Designed a platform where any creator can upload their own media arts and increase profits.

Implemented smart contract on ERC-721 token that records artwork metadata and p5.js-based contents on blockchain.

# HONORS and AWARDS

ACM ICPC Regional Contest Seoul, ACM ICPC Gogle Team, 15th place

Nov. 2021

**Korea Olympiad in Informatics**, National Programming Contest for High School Students Silver medal, 3rd place

May. 2015

#### **EXTRA-CURRICULAR ACTIVITIES**

WD Partners, Consulting Firm providing Indoor Ventilation Solution

Jun. 2021 - Dec. 2021

Demonstrated optimal condition for high ventilation efficiency through CFD analysis for pollutants. (e.g., fine dust and droplets containing viruses).

Built a prototype device using Coanda effect for real-world validation.

**Decipher**, Blockchain Research Group in Seoul National University

Mar. 2020 - Aug. 2020

Attended weekly seminars about various blockchain topics as a member of StuDeFi.

Designed a donation platform, AID-U for contributing student education expenses.