# SANGJUN SON

#### @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

#### o Dynamic Resource Scaling System:

Developed a scaling system for Google Cloud and Kubernetes clusters, adjusting resources based on event schedules. Successfully managed 1.5M RPS during IPL cricket season and cut infrastructure costs for major clients (Viacom18, JioCinema, TVING) through optimized HPA and Bigtable usage.

# • CI/CD Pipeline Efficiency and Image Optimization:

Optimized Docker images, cutting vulnerabilities by 80% and image sizes by 5x. Achieved faster deployment times with a 10x improvement in pod pull speed. Integrated with Dagger engine and notification systems. Automated release notes and dashboards, enhancing visibility and simplifying tracking across 5K+ releases.

# • A/B Testing Infrastructure for Microservices:

Built a staging environment to isolate staging from production, preventing regressions from affecting live services. Supports 700+ experiments with a monitoring dashboard for stability and quick interventions.

## 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 scholar-ship 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.

# **EDUCATION**

B.S. in Computer Science and Engineering, Seoul National University	Mar. 2016 - Aug. 2022
Interdisciplinary Major in Entrepreneurship, Seoul National University	Mar. 2021 - Aug. 2022

# **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

#### RESEARCH EXPERIENCES

Data Mining Laboratory, Seoul National University Undergraduate Research Internship (Advisor: Prof. U Kang)	Nov. 2019 - Feb. 2021
Real-Time Ubiquitous Systems Laboratory, Seoul National University Undergraduate Research Internship (Advisor: Prof. Chang-Gun Lee)	Jul. 2017 - Feb. 2018

#### 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 platform connecting buyers with artists and established a networking community for art college students. Utilized Next.js and NestJS for the front-end and back-end frameworks, with PostgreSQL as the database, and implemented a CI/CD pipeline using Vercel and Heroku for deployment.

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, Team Gogle, 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).

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.