SANGJUN SON

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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,
(* Both authors contributed equally to this work)

"**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* Mar. 2016 - Aug. 2022
B.S. in Computer Science and Engineering
Interdisciplinary Major in Entrepreneurship

Daegu Science High School, *Daegu, Republic of Korea* Mar. 2013 - Feb. 2016
High School Diploma, Natural Sciences

RESEARCH EXPERIENCES

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

- **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 large-scale tensor data.
- **DAO-CP**: Enhanced accuracy for CP decomposition of time-evolving tensors by a data-adaptive algorithm.

Real-Time Ubiquitous Systems Laboratory, *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

Basic Calculus 1, *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 demoireing 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* May. 2015
Silver medal, 3rd place

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.