Yunho Kee

OBJECTIVE

To design feasible systems and fill in the gaps in reusable software by leveraging the principles of computer science

SKILLS

Java | Spring Framework | Python | Django REST Framework | FastAPI | JavaScript | Apache Airflow | Celery | Amazon DynamoDB | PostgreSQL | Oracle | GitHub Action | Maven | Terraform Cloud | AWS IAM | SSH Tunneling

WORK EXPERIENCE

Backend Developer

Haezoom

Seoul, South Korea

1 vr 9 mos 12/2022 - 08/2024

Solar Power Forecasting System Enhancement (50k+ daily transactions)

- Fixed the algorithm with leakage, boundary errors, invalid cache, and timezone bugs (open source contribution)
- Fulfilled 24x more frequent requests, reducing processing time from 3 hours to 2 minutes (90x faster) through chunking, file compression, tensor transposition, and preprocessing (AWS Fargate, NumPy, netCDF4, SciPy)
- Optimized coordinate transformation by reverse engineering (47 s \rightarrow 14 µs, float32 \rightarrow float64, 99.55% \rightarrow 100%)
- Polled asynchronous inputs using non-blocking read-through caching and two-pointer techniques (Apache Airflow)
- Customized serializers to respond in the requested timezone and autofill periods (Django REST Framework)
- Integrated third-party APIs for consistent geocoding, reverse geocoding, and address search (FastAPI)

Settlement System Development (10k+ daily inserts)

- Utilized primitive floating-point numbers instead of decimal objects, testing accuracy against online judge data
- Modeled formulas as directed acylic graphs (DAGs) loaded by reflection and evaluated asynchronously (Celery)
- Stored results as **segment trees** with **soft delete**, **partial indexes**, and **covering indexes** (PostgreSQL)
- Customized filters to set the default timezone and autocomplete periods from dates (Django REST Framework)

Cloud Security System Development (RBAC, ABAC, Terraform Cloud, AWS IAM)

- Managed just-in-time access using roles, break-glass access via tags, and network infrastructure as code (IaC)
- **DevOps Engineer**
- MidasIn
- Pangyo, South Korea
- 05/2022 09/2022 5 mos
- Developed a cross-account AWS user management system with observability (Spring Boot, Fluent Bit, Datadog) 1 vr
- **Software Developer** Republic of Korea Navy
- South Korea
- 8 mos 06/2020 - 02/2022
- Developed an internet-based grievance service and intranet services for educational assessment (exceptional award), mental health assessment, and attendance management, fixing missing rows (Spring Framework, Oracle)

PROJECTS

LeetCode Daily Google Sheets Apps Script (JavaScript, GraphQL)

- 01/2025 02/2025 1 mo
- Replaced individual uploads with periodic <u>crawling</u>, and an optional Chrome extension with a **bookmarklet** script Woowacourse Java Format (Java, Gradle, Maven, GitHub Actions) 2 mos 10/2024 - 11/2024
- Deployed IDE plugins (Intelli], Eclipse), cross-platform binaries (macOS, Linux, Windows), and to Mayon Central WICWIU (C++, CUDA, cuDNN, CNN, Batch Normalization, ReLU, Sigmoid) 10 mos 07/2017 - 05/2018
- Released the first open-source deep learning framework among Korean universities (outstanding paper award)

CONTRIBUTIONS

Quarto (PowerShell), Posit (RStudio Inc) | pvlib python, Sandia (SNL) | Static JIRA issue export (PHP), Netresearch | Python Polylith Example (Serverless Framework) | Course: GitHub Pages, 61.8k (42k+19.8k) repositories (Jekyll)

EDUCATION

B.S. in Computer Science and Engineering (Seoul Accord recognized program), GPA 3.95/4.5 (Cum Laude) 03/2015 - 02/2020 **Handong Global University** Pohang, South Korea

- 2019 ACM-ICPC Seoul Regional Finalist
- Teaching Assistant: ICT Problem Solving (Spring 2019), Computer Architecture and Organization (Fall 2018), Algorithms Analysis (Spring 2018), C Programming Lab (Fall 2017), C Programming (CSEE) (Summer 2017)

CERTIFICATIONS

Engineer Information Processing

National Technical Qualification

South Korea

08/2021