Yunho Kee

# OBJECTIVE

To design [feasible](https://yhkee0404.github.io/posts/web/hello-interview/ticketmaster/) 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 Actions | Maven | Terraform Cloud | AWS IAM | SSH Tunneling

# WORK EXPERIENCE

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Backend Developer** | [**Haezoom**](https://haezoom.com/) | Seoul, South Korea | 1 yr   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**](https://www.linkedin.com/posts/yunho-kee-2a4878256_지난-5월-말부터-미국-샌디아-국립-연구소sandia-national-activity-7245677905689673728-nv5a))

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 → 14 µs**, **float32 → float64**, **99.55% → 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**](https://yhkee0404.github.io/posts/algorithms/decimal-round-down/) instead of **decimal** objects, testing accuracy against [online judge data](https://www.acmicpc.net/board/view/131585)

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**](https://www.jobda.im/) | Pangyo, South Korea | 5 mos | 05/2022 - 09/2022 |

Developed a **cross-account** AWS user management system with **observability** (Spring Boot, Fluent Bit, Datadog)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Software Developer** | **Republic of Korea Navy** | South Korea | 1 yr   8 mos | 06/2020 - 02/2022 |

Developed an **internet-based** [grievance service](https://ndts.navy.mil.kr/NDTS/index) and **intranet** services for educational assessment ([**exceptional award**](https://yhkee0404.github.io/_images/certificates/navy.jpg)), mental health assessment, and attendance management, fixing [missing rows](https://yhkee0404.github.io/posts/web/escape-xml10/) (Spring Framework, Oracle)

# PROJECTS

|  |  |  |
| --- | --- | --- |
| [**LeetCode Daily Google Sheets Apps Script**](https://github.com/yhkee0404/leetcode-daily-google-sheets-apps-script) (JavaScript, GraphQL) | 1 mo | 01/2025 - 02/2025 |

Replaced individual uploads with periodic [**crawling**](https://yhkee0404.github.io/posts/web/leetcode-daily-crawling/), and an optional Chrome extension with a **bookmarklet** script

|  |  |  |
| --- | --- | --- |
| [**Woowacourse Java Format**](https://github.com/yhkee0404/woowacourse-java-format) (Java, Gradle, Maven, GitHub Actions) | 2 mos | 10/2024 - 11/2024 |

Deployed IDE plugins (IntelliJ, Eclipse), **cross-platform** binaries (macOS, Linux, Windows), and to [Maven Central](https://central.sonatype.com/artifact/io.github.yhkee0404.woowacoursejavaformat/woowacourse-java-format)

|  |  |  |
| --- | --- | --- |
| [**WICWIU**](https://github.com/WICWIU/WICWIU) (C++, CUDA, cuDNN, CNN, Batch Normalization, ReLU, Sigmoid) | 10 mos | 07/2017 - 05/2018 |

Released the **first** [open source](https://opensource.org/blog/is-open-source-ever-hyphenated) deep learning framework among Korean universities ([**outstanding paper award**](https://www.kiise.or.kr/conference/board/boardview.do?CC=kcc&CS=2018&PARENT_ID=051400&NUM=119&type=newsinfo))

# CONTRIBUTIONS

[Quarto](https://github.com/quarto-dev/quarto-cli/pull/12244) (PowerShell), [Posit](https://en.wikipedia.org/wiki/Posit_PBC) ([RStudio Inc](https://en.wikipedia.org/wiki/RStudio)) | [pvlib python](https://www.linkedin.com/posts/yunho-kee-2a4878256_지난-5월-말부터-미국-샌디아-국립-연구소sandia-national-activity-7245677905689673728-nv5a), [Sandia (SNL)](https://en.wikipedia.org/wiki/Sandia_National_Laboratories) | [Static JIRA issue export](https://github.com/netresearch/jira-export/pull/7) (PHP), [Netresearch](https://netresearch.github.io/) | [Python Polylith Example](https://github.com/DavidVujic/python-polylith-example/pull/13) (Serverless Framework) | [Course: GitHub Pages](https://github.com/githubtraining/github-pages/issues/36), 61.8k ([42k](https://github.com/search?q=in%3Areadme+-user%3A%40me+%22Create+a+site+or+blog+from+your+GitHub+repositories+with+GitHub+Pages.%22&type=repositories&s=&o=desc)+[19.8k](https://github.com/search?q=in%3Areadme+-user%3A%40me+%22Your+GitHub+Learning+Lab+Repository+for+GitHub+Pages.%22&type=repositories&s=&o=desc)) repositories (Jekyll)

# EDUCATION

|  |  |  |  |
| --- | --- | --- | --- |
| **B.S. in Computer Science and Engineering** ([Seoul Accord](https://www.abeek.or.kr/abeek/seoul/) Recognized Program), GPA 3.95/4.5 (**Cum Laude**) | | | |
| **Handong Global University** | Pohang, South Korea | 5 yrs | 03/2015 - 02/2020 |

2019 ACM-ICPC Seoul Regional [Finalist](https://web.archive.org/web/20201108200059/https://sihyungyou.github.io/acmicpc2019%eb%b3%b8%ec%84%a0/)

**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 |