# CHUNG HWAN

**Backend Engineer** 

Seoul, Korea

cndghks15@gmail.com

+82 10 4910 3857

Chung Hwan Han

hanchchch

# **EDUCATION**

### **Korea University**

**BSc in Information Security** 

Seoul, Korea 03/2019 - 08/2023

- Software Engineering, Security, Network and Cloud Computing
- 4.02 GPA

### **Technical University of Munich**

Munich, Germany 04/2022 - 09/2022

STUDENT EXCHANGE

• Studied Cloud Computing, Distributed System and Peer-to-Peer Network

# WORK EXPERIENCE

Corca, Inc. Seoul, Korea MLOPS ENGINEER 07/2021 - today

Took charge of MLOps related works at the company which offers AI solution for various

- Built pipelines for data processing, continuous integration, deployment and training.
- Designed and developed high-performance language-neutral ML Model server using gRPC
- Developed real-time data stream with Kafka streams, processing ~300k messages per minute.
- Implemented event driven architecture where Nest.js servers and Go clients are participating, using Redis.
- Managed infrastructures with Pulumi.
- Successfully handled ~300k requests per minute.

Seoul, Korea Pangea, Inc.

**BACKEND DEVELOPER** 

- Developed and deployed the LINE Blockchain based NFT marketplace based on K-Pop idol contents. (https://momentofartist.com)
- RESTful API with Nest.js.
- Web frontend with React, Next.js, redux-saga.
- Managed devOps related works to serve stably for over 15K users.
- AWS ECS, AWS ElastiCache, MongoDB Atlas, CloudFlare, etc.

**Mars Green** Seoul, Korea 07/2021 - 09/2021

**BLOCKCHAIN DEVELOPER** 

- Developed Smart Contract and web backend for the etherium based NFT gallery 'Mars Green' (https://marsgreen.co).
- Wrote Smart Contract with Solidity and web backend with express.js and ethers.js.
- Connected the Smart Contract and the web server to make continuous tracking and managing through the web site possible.
- Deployed and maintained the service with AWS ECS Fargate.
- Built the CI/CD pipeline with AWS CodePipeline.

# CodeWings, Inc.

Seoul, Korea

WEB FULL STACK DEVELOPER

- Developed, deployed and maintained the algorithm education platform web service.
- Designed a well-organized REST API with Django RESTful Framework.
- Connected micro-service to each other with gRPC and socket.io.
- Improved frontend of the site to be more interactive and intuitive with Next.js and redux.
- Deployed server using AWS ECS Fargate, EC2, and CodePipeline.



# **ABOUT ME**

MLOps Engineer, Software developer, and Blockchain developer.

# LANGUAGES

**English** • Fluent (C1 Certificate)

**Korean** • Mother tongue

# STACKS

### **Python**

- Django, Flask, Airflow, Pandas Go
- Protobuf, gPRC, Gin

### **Typescript**

• Nest.js, express.js, ethers.js

### React

• Next.js, Redux-saga, Recoil

### **Solidity**

Hardhat, Alchemy

### Container

• docker, docker-compose, kubernetes

• Pulumi-AWS

### **AWS**

- EC2, ECS, Lambda, CloudWatch **GCP**
- VM, BigQuery

# CONTRIBUTIONS

### pulumi/pulumi-hugo

• #1058

### blockcoders/nestjs-ethers

• #135

# XTRA-CURRICULAR ACTIVIT

**DevKor** Seoul, Korea

**EXECUTIVE MEMBER** 

- Lectured about web backend developing at software development society of Korea University, DevKor, for students of the university in various of major.
- Held an Hackathon for the students, sponsored by 6 companies including AWS and Naver
- Developed and managed the platform for the event. (https://devk.or.kr)

CvKor Seoul, Korea

**EXECUTIVE MEMBER** 

09/2019 - 12/2020

- Participated many hacking competitions such as DEFCON, CODEGATE, zer0pts as a member of the hacking team, CyKor.
- Lectured about web security and hacking techniques at cyber security society of Korea University, CyKor, for students of Department of Cyber Security.
- Held a CTF as a member of the team CyKor. More than a hundred of competitor participated.
- Developed a platform for the competition. Served and managed tens of challenges made by me and my teammates with docker and three on-premise linux machines

## **Contract Research Project**

Seoul, Korea

PENETRATION TESTER

12/2020 - 07/2021

- As a contract research project which has assigned to department of Cyber Security of Korea University.
- Found several vulnerabilities and exploits including Stored XSS, Information disclosure, open redirect, etc at one of Korea's largest game companies' web services.

### nestjs-slack-listener

Github

NEST.JS MODULE FOR BUILDING SLACK APPLICATIONS.

- Wrote a blog post about this project (link)
- Developed decorators that help build Slack applications with Nest.js, in typical Nest.js-
- Published on npm

### i-wanna-play-minecraft

Github

AUTOMATED MINECRAFT SERVER CLOUD PROVISIONING TOOL

10/2022

- For those who want to serve Minecraft server but poor
- Provision a running Minecraft server instance in cloud instantly with only one command
- Pause, restart, or even destroy the instance with one command
- Specify amount of time to run the server to reduce the costs
- Used Pulumi and Go client of it

gimi Github

CLOUD-BASED MALICIOUS URL DETECTION SYSTEM.

09/2022 - On going

- Inspect the URL using containers and detect whether it is malicious or not
- Provision a new container for each URL to inspect it in isolation, just like FaaS
- Built a simple FaaS platform, to operate heterogenous functions in cloud
- Used NestJS for controllers and micro-services, Docker Go client for container management, protobuf for communications

# HONORS

2020 8th Place, DEFCON#28 CTF 2020 6th Place, CODEGATE2020 CTF Online

Online