

45, Hyojadong-gil 6 beon-gil, Nam-gu, Pohang-si, Gyeongsangbuk-do, Rep. of KOREA

□ (+82) 10-2203-4462 | May 1462@postech.ac.kr | Ahttps://bluehorn07.dev | Discounting BlueHorn07

### **Education**

#### POSTECH(Pohang University of Science and Technology)

B.S. IN COMPUTER SCIENCE AND ENGINEERING

• Got a GLP Scholarship twice which is given to promising students in CSE Dept.

#### POSTECH(Pohang University of Science and Technology)

B.S.(Double Major) in Mathematics

Pohang, S.Korea Mar. 2018 - PRESENT

Pohang, S.Korea Sept. 2019 - PRESENT

### Skills\_

**Programming** C++, Node.js, TypeScript, Python, JAVA, R, LaTeX **Back-end** Express, NestJS, REST API, MySQL, TypeORM

ML/DL PyTorch, TensorFlow, R, Pandas

Front-end HTML5, CSS, SASS, ReactJS, Redux, Semantic-ui, Jekyll

Etc. Docker, Jest, LaTex

# **Experience**

PoApper inc. Pohang, S.Korea

CHIEF DEVELOPMENT OFFICER

• Launch a mobile meal ticket application 'Posikyi' in 2021.

- Design & implement Database and REST API with NestJS, MySQL, Swagger.
- Lead TDD process and publish code coverage using mocking and Jest.
- Develop with following the OOP's overriding rule, and try to achieve low coupling.
- Follow the iterative development paradigm.
- · Review partner's code and got reviewed.

#### Computer Vision Lab (Prof. Jaesik Park)

· Learn PyTorch & TensorFlow frameworks, and Colab.

- · Research on Omni-Detection on Equirectangular Image.
- Experiment with many state-of-art detection models: Faster R-CNN, CenterNet, DETR.
- Renewal the code of "SphereNet(2018)" to be more efficient and to support general size kernels. [code]
- Develop a new 360 projection named "AdaptiveStride" mapping.

#### Korea Institute of Science and Technology, Center for Imaging Media Research

Seoul, S.Korea Jun. 2019 - Aug. 2019

Pohang, S.Korea Jun. 2020 - PRESENT

Jun. 2020 - PRESENT

Undergraduate Researcher

UNDERGRADUATE RESEARCHER

· Learn Python, CNN, CUDA, and GAN.

- Research Face Detection with real-time video from GoPro Fusion.
- Design the detection flow and orchestrate the process.
- Implement ERP rotation code and FOV-ERP projection with NumPy. [code 1], [code 2]

### Geometric Algorithm Lab (Prof. Hee-Kap Ahn)

Pohang, S.Korea

Undergraduate Researcher

- · Study the concepts of Minkowski distance.
- Solve the problems of finding  $L_1$  center,  $L_1$  center with obstacles.
- Solve the problems of finding  $L_1$  two centers,  $L_1$  two center with obstacles.

SEOKYUN HA · CURRICULUM VITAE MARCH 30, 2021

Sept. 2018 - Dec. 2018

# **Extracurricular Activity**

PoApper Pohang, S.Korea

CORE MEMBER & VICE PRESIDENT AT 2021

- Gained expertise in BackEnd, FrontEnd skills.
- Communicate with members, and share the developmental experiences.
- Focus on build data platform on campus.
- Lead 2020-Fall BackEnd Seminar and 2021-Spring NestJS Seminar.

# **Project**

#### Posikyi, POSTECH Mobile Meal Ticket Payment System

Pohang, S.Korea

CHEIF BACKEND DEVELOPER

Jun 2020 - Jan 2021.

Sept. 2019 - PRESENT

- Develop mobile meal ticket application to replace paper ticket. Users can purchase and view meal tickets through the app, and student restaurants collect data and help plan their meals through monthly statistics and user-type statistics.
- Design & Implement Database with MySQL & TypeORM.
- · Design & Implement API with NestJS & Swagger
- Implement TDD codes and Code Coverages with Jest

#### POPO, POstechian's POrtal

Pohang, S.Korea

LEAD DEVELOPER Jan. 2021

- Develop a convenient service to reserve equipment/place.
- Implement BackEnd with NestJS, and FrontEnd with ReactJS. [code1], [code2]
- Implement authentication/authorization with Passport.js.
- Introduce reservation recommendation algorithm with collaborative filtering.

POSTECH CT camp Pohang, S.Korea

GAME DEVELOPER

Dec. 2019 - Jan. 2020

- Develop a game inspired by the "tit-for-tat" game, in which the player challenges two bosses by making automata of the tit-for-tat strategy. Players should find the best strategy for two bosses within 10 challenges.
- Implement logic for Tit-for-Tat strategic battle.
- Implement Score Board UI.
- · Design the boss's Tit-for-Tat strategy.

# **Writing**

I love to describe what I studied again in my style. Through writing, I enjoy sharing my knowledge and worries. I'm running three Jekyll blogs about development, computer science and mathematics, and have written more than 130 posts so far.

bluehorn07's Blog

BLOG FOR DEVELOPMENT & COMPUTER ENGINEERING

- It is a blog that describes the problems, and thoughts that we encountered during developments.
- It deals NestJS, PyTorch, Software Design, and Backend

Blue-Screen link

BLOG FOR COMPUTER SCIENCE

- The above blog contains computer science and development and "Blue-Screen" contains computer science from college.
- It deals Algorithm, Statistical Data Mining, Data Mining and Computer Vision

Blue-Math link

BLOG FOR MATHEMATICS

- · It is a blog that describes mathematical contents that I studied in college, and this represents me as a mathematician.
- It deals Modern Algebra, Applied Complex Variable, Probability & Statistics and Linear Algebra

# **Extra Activities**

2021	NestJS Seminar Mentor, 2021-Spring, PoApper	S.Korea
2020	Backend Seminar Mentor, 2020-Fall, PoApper [link]	S.Korea
2020	Team IHC: 3rd Rank, 2020 POSTECH Porgramming Contest	Pohang, S.Korea
2019	Educational Mentor, Korea Hydro & Nuclear Power Co.,Ltd., Einstein Class	Uljin, S.Korea
2018	<b>Educational Mentor</b> , POSTECH ×Seoul National University of Education Educational Volunteer	Pohang, S.Korea

March 30, 2021 Seokyun Ha · Curriculum Vitae 2