Nathan Cho

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EDUCATION

Bard College Aug 2022 – May 2024

B.A. in Computer Science, GPA: 4.0

Annandale-on-Hudson, New York, United States

• Full tuition scholarship recipient, Founder of Bard Computer Science Club, Member of Student Government

Chung-Ang University

Mar 2019 - Dec 2020

B.Eng. in Computer Science and Engineering (transferred to Bard College), GPA: 3.9

Seoul, South Korea

• Ranked in top 10 Computer Science programs in Korea, Study abroad at Stony Brook University (Spring 2020)

SKILLS

Languages Technologic Other JavaScript, TypeScript, Python, Java, C/C++, HTML/CSS, SQL, R, Regular Expression

Technologies React, React Native, Next.js, Android, Node.js, Jest, NumPy, PyTorch, MongoDB, Docker, AWS, Git

API design, CI/CD, Open source contribution, UI/UX design, User research

EXPERIENCES

Engineer Sergeant

Republic of Korea Army, 1st Corps

Jan 2021 - Jul 2022

- Pioneered and operated a new monitoring system for tactical communication network, achieving 98% uptime
- Oversaw a squad of 6 combat engineers for 10 months, winning the Team of the Year Award from Major General

Software Engineer

myworkbeat Inc.

Dec 2019 - Jan 2021

- Developed and launched <u>sugosugo</u> local gig job listing/payment platform, built with React and deployed on AWS
- Spearheaded the initial web app launch by contributing 15K+ lines of code, reaching 1,000+ monthly users
- Identified page load bottleneck issue from user analytics and improved the latency to ~100ms using CDN
- Streamlined deployment and testing by implementing CI/CD pipelines, increasing deploy frequency by 500%

Software Engineer Intern

Hyosung Corporation

Aug 2019 - Dec 2019

- Launched a safety inspection web application for 30+ hydrogen fuel cell vehicle charging stations with Node.js
- Rolled out customizable form, video upload and analytics report features used by 200+ field inspectors

Software Engineer Intern

M+ Learning Institute

May 2019 - Jul 2019

- Created a time tracking system for Android phones and kiosks, currently used by 500+ students and 80+ employees
- Engineered a serverless SMS service using Firebase, sending 2,500+ notifications for less than \$1 per month
- Decreased server expense and average latency by 90% with client-side request caching optimization

PROJECTS

work.elastic - People data analytics platform for SMBs | Next.js, PyTorch

Sep 2022 - Current

- Developed and trained a machine learning model that can predict employee turnover with 97% accuracy
- Recruited and operated a multidisciplinary (legal, design, HR) team of 6 from Columbia, Lithuania and U.S.

Mapple - Local experience curator app | React Native, Google Cloud

Sep 2022 - Nov 2022

- Awarded 2nd place in a hackathon hosted by Google, leading a team of 4 to win among 130 competing teams
- Designed the ranking algorithm for place recommendations, integrating Google Maps API into user experience

<u>Handover</u> – Knowledge base SaaS for military intranet | React, MongoDB, Docker

Sep 2021 - Oct 2021

- Winner of the Chief of Naval Operations Award (4th out of 70 teams) in the national open-source hackathon
- Directed a 5-member remote team for 7 weeks, organizing 10+ meetings and reviewing 90+ pull requests
- · Architected the RESTful API including access management, collaborative editing and version control features
- Optimized build times by ~80% by dockerizing the application into 4 microservices using Docker Compose

Tapad – Mobile music remixer | Android, Firebase

Feb 2016 – Jul 2018

- Surpassed 300,000+ installs and 3,900+ reviews on Play Store and resolved 1,500+ tickets as a solo developer
- Implemented memory optimization, leading to 85% less crashes and enabling real-time 16-channel audio playback