

Nathan Cho

ntcho13@gmail.com | [LinkedIn](#) | [GitHub](#) | [Annandale-on-Hudson, NY](#)

EDUCATION

Bard College B.A. in Computer Science, GPA: 4.0 • Full tuition scholarship recipient, Founder of Bard Computer Science Club, Member of Student Government	Aug 2022 – May 2024 <i>Annandale-on-Hudson, New York, United States</i>
Chung-Ang University B.Eng. in Computer Science and Engineering (<i>transferred to Bard College</i>), GPA: 3.9 • Ranked in top 10 Computer Science programs in Korea, Study abroad at Stony Brook University (<i>Spring 2020</i>)	Mar 2019 – Dec 2020 <i>Seoul, South Korea</i>

SKILLS

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

EXPERIENCES

Engineer Sergeant • 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	Republic of Korea Army, 1st Corps	Jan 2021 – Jul 2022
Software Engineer • 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%	myworkbeat Inc.	Dec 2019 – Jan 2021
Software Engineer Intern • 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	Hyosung Corporation	Aug 2019 – Dec 2019
Software Engineer Intern • 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	M+ Learning Institute	May 2019 – Jul 2019

PROJECTS

<u>work.elastic</u> – People data analytics platform for SMBs Next.js, PyTorch • Developed and trained a machine learning model that can predict employee turnover with 97% accuracy • Recruited and managed a multidisciplinary (legal, design, HR) team of 6 from Columbia, Lithuania and U.S.	Sep 2022 – Current
<u>Mapple</u> – Local experience curator app React Native, Google Cloud • 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	Sep 2022 – Nov 2022
<u>Handover</u> – Knowledge base SaaS for military intranet React, MongoDB, Docker • 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	Sep 2021 – Oct 2021
<u>Tapad</u> – Mobile music remixer Android, Firebase • 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	Feb 2016 – Jul 2018