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	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   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 sugosugo — 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%

Technical Program Manager Intern   Hyosung Corporation   **Aug 2019 – Dec 2019**
- Built and implemented a new internal safety inspection tool used by 30+ fuel cell EV charging stations
- Planned and executed software development lifecycle with agile methodologies, delivering key features in 8 weeks
- Gathered insights from usage data and provided employee health & safety KPI reports to business stakeholders

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 managed 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

Handover – **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

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