Kanghyun (Gordon) Kim

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Education

Duke University — Expected May 2025
BSE in Electrical and Computer Engineering and Computer Science, GPA: 3.9 — *Durham, North Carolina*
Relevant Coursework: Data Structures & Algorithms, Computational Methods in Engineering, Computer Architecture, Software Design/Implementation

Work Experience

Republic of Korea Army, 7th Corps Command — Jun 2022 - Dec 2023
Systems Operations Lead — *Icheon, South Korea*

- Operated 4 Linux-based communication servers for 5000+ users for daily military operations and Korea-US Combined Military exercises
- Developed program to monitor simplex/duplex disconnections and security breaches for Korean Army and Air Force Military-broadband Communication Networks
- Selected by Company Commander to lead Network Operations Squadron of 13 members

Private CS & Math Tutor

- Created competitive math textbooks (Combinatorics, Number Theory, Geoemetry, Algebra) including original practice questions for AMC and AIME(top 5% of AMC test takers)
- Topics taught: C/C++, Python, Algebra I/II, Geometry, Calculus I/II, AP Chemistry, AP Physics, AMC, AIME

Projects

Gundori — Jan 2023 - Feb 2023
Svelte

- Developed web app for Korea Army soldiers to visualize total/remaining service days and manage military leave days
- Implemented Web Storage API paired with Svelte Stores to sync unique user information across multiple sessions
- Tested complete application with 24 Army Signals Operation Company soldiers to plan their final vacation

Golf Reservation Bot — May 2022 - Jun 2022
Python

- Created 'sneaker bot' for golf reservations automatically booking tee times within a user-specified time range
- Successfully booked 6 reservations in 6 weeks with 100% success rate for 3 users

CS307 (Software Design and Implementation) Final Project — Aug 2021 - Dec 2021
Java

- Led a team of six engineers to design a chess engine with player profiles, custom game rules (load and save preferences, custom pieces, chess power-ups), and game area editor
- Implemented ChessEngine and ChessView API, Model View Controller (MVC) design, and data-driven design by reading/writing JSON files locally
- Achieved 90% line test coverage for all implemented MVC Interfaces with JUnit testing

Duke Weight Room Data Visualization — Aug 2021 - Sep 2021
Python

- Collected live data patterns of monthly Duke Weight Room occupancy and generated scatter plot using matplotlib
- Applied Locally estimated scatter plot smoothing regression model (LOWESS function) with python module statsmodel for each weekday to propose optimal times for *optimal gains*

Web Projects — Jun 2020 - present
HTML, JavaScript, CSS

- **Sudoku:** Editor for daily sudoku enjoyers with explicit row, column, box error visualizations
- **Beatpad:** Online beatpad to play and record custom beats with preloaded sounds or personal audio
- **Rubik's Cube:** 2D rubik's cube simulator that generates random scrambles and records formal turn notation

Other Experiences and Interests

Programming Languages: C/C++, Golang, Java, Svelte, Python, Javascript
Languages: English (fluent), Korean (fluent)