

SEUNGHYUN (JOE) LEE

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SUMMARY

- Motivated industrial engineering student specializing in operations research, seeking experiences to contribute to society and positively impact people. Passionate about learning new ideas and articulating solutions to challenges. Skilled at managing workload and meeting deadlines.

PROJECTS

Data Visualization: S&P 500 Visualized

2023

- Utilized d3.JS to visualize the trend of S&P 500 compared to other investment options: FED Rate, NASDAQ, and KOSPI
- Provided interactive graphs that compare compounded benefits of annual versus monthly investments in the S&P 500, along with the long-term growth of the S&P 500 compared to a savings account, factoring in Federal Reserve rates
- Highlights the power of compound interest and emphasizes the effectiveness of index funds by demonstrating a 368.3% out-performance of S&P 500 compared to a savings account

AI Speech/Chat-bot

2023

- Developed a speech-recognition web service utilizing OpenAI API and Speech Recognition API
- Implemented a user-friendly interface with an emphasis on accessibility, specifically for elderly users, to ensure an inclusive and seamless digital experience to interact with LLM models using speech

Personal Blog Website (shyun.dev)

2023

- Built a dynamic MERN Stack website from scratch with a responsive React JS front-end and Tailwind, utilizing Fetch API to serve data from the server and database
- Developed a Node JS-based REST API to manage user, post, and artwork data, employing JSON Web Tokens and HttpOnly cookies for authorization and authentication.
- Deployed the system on a custom domain, with the back-end API hosted on its subdomain.

WARP Shoes Project

2023

- Modeled and optimized the production strategy for WARP Shoes Company, resulting in a maximum profit of \$11,818,500
- Projected estimated future demand for WARP Shoes by calculating the mean of the seven years of historical demand data.
- Utilized Linear programming relaxation on the mathematical model predicting the profit using AMPL and the Gurobi solver library

PROFESSIONAL EXPERIENCE

Engineering Without Borders: University of Toronto

Toronto, Canada

Community Projects Events Coordinator

Oct 2023 -

- Organized and hosted a community event of 20+ participants to promote volunteering opportunities in the community garden project and urban gardening
- Responsible for overseeing the organization and coordination of all events related to the development process of the community garden, funded with \$1250 from the Good Ideas Fund at Hart House

Yanadoo

Seoul, Korea

Freelance Translator

Jan 2023

- Translated educational workbooks and video-lectures for 2023 Q1 produced by Yanadoo, Kakao's English education platform

Republic of Korea Special Warfare Command

Icheon, Korea

Interpreter/Administrative Support

July 2021 - Dec 2022

- Coordinated and cooperated with SOCKOR as the leading interpreter for the Current Operations Cell during CCPT(Combined Command Post Training) and UFS(Ulchi Freedom Shield) Exercise
- Provided comprehensive administrative support to the ROKSWC command group: comprising the Chief of Staff, Executive Officer (XO), and Aide-de-Camp (ADC)

EDUCATION

University of Toronto

2020-2026(PEY)

- B.S in Industrial Engineering | Dean's List | cGPA: 3.50+
- Relevant Courses: Human Factors, Operations Research(Deterministic, Stochastic), Data Science, Data Structures and Algorithms

St. Georges School, Vancouver

2017-2020

- Graduation with Distinction

TECHNICAL SKILLS & INTERESTS

Programming Languages Python, JavaScript, Java, C

Web Development Frameworks React JS, Node JS, HTML5, CSS3, d3.JS, NEXT.JS

Databases MongoDB, PostgreSQL

Tools Git, AMPL, Gurobi, Microsoft Office: Excel, PowerPoint, Word

Hobbies Visual Arts, Photography, Hand-drip coffee, Taking care of plants, Practicing Guitar, Cooking