Software Engineer
B.A in Computer Science, New York University

Jeong Sun Yu

jsy332@nyu.edu
[redacted]

Personal information has been redacted for privacy. Reach out for my most recent, complete resume.

Summary

Full-stack software engineer experienced in web applications, data visualization,, proficient in mathematical concepts, and skilled in developing image processing algorithms. Demonstrated ability to lead pilot projects to successful production stage.

Experience

2021 - Present [redacted] *Seoul, Republic of Korea*

Treatment Planning System 3D Reconstruction
C++, C#, MFC
Project: converted 2D contour data as 3D objects in spatial rendering
Achievements: reconstructed contours with complex topologies into mesh entities for optimized medical data visualization.

- Triangular decomposition of surfaces and contiguous planes
- Rendering mesh objects onto 3D medical images
- Real-time representation of planar intersections within 3D objects

Web Pictures Archiving and Communications Viewer
JavaScript, React, Node
Project: web-based medical image viewer tailored to radiation oncology departmental workflow
Achievements:

- Presentation at American Society for Therapeutic Radiology and Oncology 2023 Annual Exhibition
- Took on a comprehensive role in: project development, application architecture planning, full-stack software developing, and source code maintenance
- Application of WebGL, 2D and 3D visual representations on the web
- Implemented performance enhancement tailored to power network environments
- Intuitive interactive interface for both desktop and mobile platforms

2018 - 2019 [redacted] *New York, New York, U.S.A.*

Role: Plan, direct, and coordinate free public educational programs
Project: Coding 101 for beginners, Art History in New York City

2018 - 2018 [redacted] *New York, New York, U.S.A.*

Solidity, Java, Android Studio
Project: Android search application based on Ethereum smart contracts.

Programming Languages & Frameworks

Java, Python, JavaScript, C++, C, Spring, ReactJS, NodeJS, VueJS, MFC, OpenMP

Language

English (fluent), Korean (native), Mandarin (HSK 6 proficiency), Italian (beginner)

Awards & Other Interests

Founders Honors Scholar, New York University
Pottery