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

Lucy Yu
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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   **Software engineer at XXXXXXXXXX**   *Seoul, Republic of Korea*

Treatment Planning System 3D Reconstruction
C++, C#, MFC
Project: reconstruct sets of 2D contour data as 3D surfaces
Achievements: transformed contours with complex topologies into mesh entities and rendered them in 3D and multiplanar views

- ❖ Triangular decomposition of surfaces and triangulation branching between contiguous planes
- ❖ Rendering mesh objects onto 3D medical images
- ❖ Real-time representation of planar intersections of 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 rendering on web browsers
- ❖ Implemented performance enhancement tailored to challenging network conditions
- ❖ Intuitive interactive user interface for both desktop and mobile platforms

2018 - 2019   **Project development lead at XXXXXXXXXX**   *New York, New York, U.S.A.*

Role: Plan, direct, and coordinate free public educational programs
Project: Coding 101 for beginners

2018 - 2018   **Software engineer intern at XXXXXXXXXX**   *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++, Spring, ReactJS, NodeJS, VueJS, MFC, OpenMP

Language

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

Awards & Other Interests

University Honors Scholar, New York University
Pottery