Soo Yeon Ahn

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Personal Summary

Aspiring software engineer with experience as a Software Engineer Intern at Dassault Systèmes, where modules for 3D modeling software were engineered and maintained, enhancing usability for over 300,000 global users. Proficient in C++, Java, Python, and JavaScript, with a focus on backend development and expanding into full-stack. Eager to leverage technical skills and collaborative experience to contribute to innovative software solutions.

Education

University of Illinois Urbana-Champaign — Aug 2021 – May 2025
B.S. in Mathematics and Computer Science — **GPA**: 3.69/4.0
• **Achievements**: Distinction Math/CS (Department Honors); Fall 2021, Spring 2022 (Dean's List)

University of Washington, Seattle — Sep 2020 – May 2021
B.S. Biological and Physical Sciences (Pre-Sciences) — GPA: 3.95/4.0
• Annual Dean's List: 2020 – 2021

Work Experience

Dassault Systèmes — Jul 2023 – Jan 2024
Software Engineer Intern — Daegu, Republic of Korea
• Engineered and maintained C++ and COM-based modules for 3D modeling software used by over 300,000 global organizations, improving software reliability and performance
• Designed intuitive UI components with proprietary frameworks, enhancing product usability and aligning with customer experience improvements
• Collaborated with international engineering teams to implement cross-border software solutions and facilitate code reviews, demonstrating adherence to established software development methodologies

Projects

Maze Game (Solo) — July 2025
• Developed a maze-solving game where the maze is generated depending on user input and Prim's algorithm
• Built based on C++ to expedite the graph generation and Crow to connect to the server
• CSS, HTML, JavaScript used for user interaction and to display the text-displayed maze on the server

2D Heat Simulator (Solo) — June 2025
• A 2D heat simulator used to mimic the distribution of heat over time based on PDE
• Used NumPy and Matplotlib to calculate and display the distribution of heat over time

Optical Character Recognition (OCR) App (Team) — CS 222 (Fall 2022)
• Developed an app for OCR using OpenCV and Pytesseract to extract and highlight user-specified text from images
• Enhanced recognition accuracy with custom image processing techniques

Movie Ratings Query (Team) — CS 411 (Summer 2022)
• Implemented a webpage that could query movie ratings using Google Cloud and MySQL
• Included processes like importing movie ratings and processing ratings to make the data easy to query
• Webpage development included front-end technologies such as HTML, CSS, and JavaScript

Technical Skills

• **Programming**: C++, C, Python, Java, Haskell, MATLAB, Verilog, JavaScript
• **Tools & Technologies**: OpenCV, Pytesseract, Git, VSCode, COM, MongoDB, MySQL, Database Management
• **Concepts & Methodologies**: OOP, FP, SDLC, TDD, Multithreading & Concurrency, Version Control, Software Development Methodologies, Coding Language, Basic Coding Principles, Code Review Participation, Testing Software Applications
• **Professional Skills**: English Language Proficiency, Korean Language Proficiency, Limited Mandarin Chinese Language Proficiency