

# Soo Yeon Ahn

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## Personal Summary

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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

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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

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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

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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

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- **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