Soo Yeon Ahn
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Education

University of Illinois Urbana-Champaign — Aug 2021 – May 2025
B.S. in Mathematics and Computer Science — GPA: 3.69/4.0
- 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
- Developed and maintained C++ and COM-based modules for 3D modeling software used by over 300,000 global organizations
- Designed intuitive UI components using proprietary frameworks, enhancing accessibility and usability
- Collaborated with international engineering teams, contributing to cross-border software development

Teaching & Leadership

Private English Institution — Feb 2024 – Jul 2024
English Instructor — Seoul, Republic of Korea
- Taught English to primary and secondary school students, adapting curriculum to varied proficiency levels
- Built communication skills and developed instructional approaches for individualized learning

Computer Science Department (UIUC) — Jan 2022 – May 2023
Course Assistant (Introduction to Computer Science II) — Urbana, IL
- Led weekly discussion sessions (~30 students) on C++ fundamentals and data structure algorithms
- Provided hands-on debugging help and personalized mentoring during 4–6 hours of office hours weekly
- Supported students in developing coding projects and improving problem-solving techniques

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
Concepts	OOP, FP, SDLC, TDD, Multithreading & Concurrency, Version Control
Spoken/Written	Korean (Native), English (Fluent), Chinese – Mandarin (HSK Level 4)