#### Soo Yeon Ahn

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#### **Education**

University of Illinois Urbana-Champaign

B.S. in Mathematics and Computer Science

- Distinction Math\CS (Department Honors); Fall 2021, Spring 2022 (Dean's List)

University of Washington, Seattle

B.S. Biological and Physical Sciences (Pre-Sciences)

- Annual Dean's List: 2020 - 2021

Sep 2020 - May 2021

Aug 2021 - May 2025

GPA: 3.95/4.0

GPA: 3.69/4.0

## **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
- 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
Tools & Technologies

Tools & Technologies Concepts

C++, C, Python, Java, Haskell, MATLAB, Verilog, JavaScript OpenCV, Pytesseract, Git, VSCode, COM, MongoDB, MySQL OOP, FP, SDLC, TDD, Multithreading & Concurrency, Version Control

Spoken/Written

Korean (Native), English (Fluent), Chinese – Mandarin (HSK Level 4)