Soo Yeon Ahn

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Personal Summary

Software engineer with C++ development experience at Dassault Systèmes, contributing to modules used by 300K+ users. Proficient in backend development with expanding frontend skills. Strong academic foundation in algorithms, systems, and databases. Passionate about building performant, user-centric software.

Technical Skills

- Languages: C/C++, Python, Java, JavaScript, Haskell, MATLAB, Verilog
- Frameworks/Tools: OpenCV, Crow, Git, VSCode, COM, Visual Studio
- Databases: MySQL, MongoDB
- Version Control: Git (CLI), GitHub proficient with branching, merging, rebasing, resolving merge conflicts, and managing pull requests
- Other: Object-Oriented Programming (OOP), Test-Driven Development, (TDD), SDLC, Version Control

Education

<u>University of Illinois Urbana-Champaign</u>

B.S. in Mathematics and Computer Science

Aug 2021 – May 2025 GPA: 3.69/4.0

Sep 2020 - May 2021

• Achievements: Distinction Math/CS (Department Honors); Fall 2021, Spring 2022 (Dean's List)

University of Washington, Seattle

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 (On-Site)

- Engineered and maintained C++/COM modules for enterprise 3D modeling software with 300K+ users
- Designed and integrated UI components using proprietary frameworks to improve UX
- Collaborated with international teams on cross-border software solutions and code reviews

Teaching & Leadership

Computer Science Department (UIUC)

Jan 2022 - May 2023

Course Assistant (Introduction to Computer Science II)

Urbana, IL

- Led weekly lab sessions (~30 students) on C++ fundamentals and data structure algorithms
- Assisted hands-on debugging and personalized mentoring during 4–6 hours of office hours weekly
- Supported students in developing coding projects and improving problem-solving techniques

Projects

To-Do List Web App (Solo)

July 2025

June 2025

- Developed a full-stack web application for managing personal to-do tasks with user authentication
- Built with Flask, SQLite, and SQLAlchemy on the backend; implemented login/registration using secure password hashing
- Designed dynamic task UI using HTML/CSS/JavaScript, enabling users to create, display, and mark tasks in real time
- Applied modular Flask structure with routes, models, and templates for maintainable codebase <u>Maze Game</u> (Solo)
- Built a dynamic maze game using C++ and Prim's algorithm; deployed using Crow server
- Designed interactive UI with HTML/CSS/JS to display maze visualization in browser

Languages

- English (Fluent)
- Korean (Native)

• Mandarin (Conversational