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

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 (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

Projects

To-Do List Web App (Solo)   July 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

Maze Game (Solo)   July 2025
- 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

Optical Character Recognition (OCR) App (Team)   Fall 2022
- Extracted user-specified text from images using OpenCV and Pytesseract; enhanced recognition with image preprocessing

Movie Ratings Query (Team)   Summer 2022
- Built a MySQL + Google Cloud backend and front-end UI to query and visualize movie data upon user request

Languages

- English (Fluent)   • Mandarin (Conversational)
- Korean (Native)