Soo Yeon Ahn

syahn2[at]illinois.edu | LinkedIn | Portfolio

Education

University of Illinois Urbana-Champaign *(Aug 2021 – May 2025)*
- **B.S. in Mathematics and Computer Science** *(GPA: 3.7/4.0)*
- Dean's List: Fall 2022, Spring 2023

University of Washington, Seattle *(2020 – 2021)*
- **Biological and Physical Sciences** *(GPA: 3.99/4.0)*
- Annual Dean's List: 2020 – 2021

Technical Skills

Programming Languages: C++, Python, Java, C, MATLAB, SQL (MySQL, MongoDB)
Tools & Technologies: OpenCV, Pytesseract, COM, Git, VSCode, Object-Oriented Programming (OOP)
Languages: Fluent in English & Korean, Intermediate Mandarin (HSK Level 4)

Work Experience

Dassault Systèmes, Korea *(July 2023 – Jan 2024)*
Software Engineer Intern
- Developed **C++ and COM-based** software for **3D modeling applications**, enhancing functionality for 300,000+ organizations globally.
- Designed and implemented **UI components** using **Sypstyle**, improving user accessibility and workflow.
- Collaborated cross-functionally with engineers from **multiple countries**, contributing to global software development efforts.

Projects

Optical Character Recognition (OCR) App *(Software Design Lab Project)*
- Developed an **OCR-based application** using **OpenCV & Pytesseract**, allowing users to extract and highlight specific text from images.
- Applied **image processing techniques** to improve text recognition accuracy and performance.

Web Page Ranking Algorithm *(Data Structures Project)*
- Implemented a **PageRank algorithm** using **graphs and priority queues** to dynamically rank web pages based on search keywords.
- Utilized **data structures and traversal algorithms** to optimize ranking efficiency.

Image Processing Application *(Intro to CS II Project)*
- Built an application that applies **custom color filters** (Redscale, Greyscale, Bluescale, Greenscale) to images.
- Developed an additional **mosaic filter** for image blurring using **matrix operations**.

Teaching & Leadership Experience

University of Illinois Urbana-Champaign *(Jan 2022 – May 2023)*
Course Assistant – C++ Programming
- Led **weekly discussion sessions (~20 students)**, teaching **C++ fundamentals, data structures, and traversal algorithms**.
- Assisted students **4–6 hours per week** in debugging and problem-solving during office hours.
- Provided **one-on-one mentoring** and guided students through coding assignments and projects.