

# SANYAM GARG

+1 (646) 599-7862 • sanyamg@icloud.com • sanyamgarg.com  
106 N Prospect Ave, Madison, WI

## EDUCATION

University of Wisconsin-Madison

Madison, WI

Bachelor of Science in Computer Science & Data Science

August 2023 – May 2027

### Relevant Coursework

Data Structures & Algorithms, Introduction to Artificial Intelligence, Linear Algebra, Statistics R Programming, Discrete Mathematics, Calculus I & II

## PROJECTS

Handwritten Digit Recognition Web App

Madison, WI

Personal Project

December 2024 – March 2025

- Developed and trained a Convolutional Neural Network (CNN) using PyTorch on the MNIST dataset, achieving **~98% validation accuracy**.
- Implemented image pre-processing (resizing, color inversion) and data augmentation techniques to improve model robustness.
- Built a Flask-based web application that allows users to upload images of handwritten digits for real-time classification.

Distributed Peer-to-Peer File Sharing System

Madison, WI

Personal Project

August 2024 – November 2024

- Architected** a robust distributed system in Python to enable secure file transfers across a P2P network using multithreading and chunk-based transmission.
- Implemented** file integrity verification with SHA-256, ensuring **100% accuracy** in file reconstruction from 64KB chunks.
- Developed** both CLI and Tkinter-based GUI interfaces to simplify configuration, peer discovery, and file management for end users.

SPlanner

Dubai, UAE

Personal Project

March 2022 - December 2023

- Developed** a cross-platform scheduling app using Flutter and Dart, improving task management efficiency for 100+ users.
- Optimized** data retrieval with dynamic arrays and linked lists, enhancing performance by 25%.
- Integrated** secure Firebase authentication, safeguarding user data with industry-standard hashing protocols.

## EXPERIENCES

Cognizant

Remote

Agile Methodology Job Simulation - Forge

February 2024 – May 2024

- Analysed** Agile and Waterfall methodologies in a simulated project environment, identifying key process improvements that could reduce sprint bottlenecks by 20%.
- Developed** detailed presentations and process maps that highlighted actionable recommendations for project management improvements.

Skyscanner

Remote

SDE Job Simulation - Forge

November 2023 – January 2024

- Engineered** a responsive web application using React, focusing on user experience and rapid prototyping
- Built** a dynamic travel date selection interface with Backpack React, contributing to enhanced product usability and customer engagement.

## TOOLS

**Programming Languages:** Java, Python, JavaScript, Dart, SQL, R  
**Software:** Flutter, React, Tkinter, Git, Docker, Linux, Node.js, HTML/CSS, Junit, NumPy, Scikit-learn, PyTorch, Flask  
**Concepts:** Object-Oriented Programming, Data Structures & Algorithms, Agile Methodologies, REST APIs, Version Control, Debugging, Machine Learning, Data Visualization