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**.**
- 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

- Created 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

Research Assistant Madison, WI
Keles Group (UW-Madison) April 2025 – Present

- Contributed to developing and evaluating deep learning models (e.g., VERMIN framework) to predict DNA methylation from genomic sequences for the Sequence2Methylation-v2 project.
- Managed computational environments (Conda) and implemented data processing/analysis workflows (Snakemake) for large-scale human/mouse genomic datasets.
- Utilized Python, PyTorch, and a high-performance computing (HPC) cluster with GPUs for deep learning applications and data quality control.

Skyscanner Remote
SDE Job Simulation - Forage 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, Linux, Node.js, HTML/CSS, Junit, NumPy, PyTorch, Flask
Concepts: Object-Oriented Programming, Data Structures & Algorithms, Agile Methodologies, Version Control, Debugging, Machine Learning, Data Visualization