

Aaryan Sharma

+1(312)-871-2883 · [sharmaaaryan4012.github.io](https://github.com/sharmaaaryan4012) · [LinkedIn](#) @sharmaaaryan · [GitHub](#) @sharmaaaryan4012

EDUCATION

University of Illinois Urbana-Champaign(UIUC)
Bachelor's of Science in Mathematics & CS

GPA: 3.91/4.0
Expected: Dec 2025

EXPERIENCE

UIC College of Engineering, Chicago, IL
Undergraduate Research Assistant

June 2023 - May 2024

- Evaluated presidential election prediction models using four methods to find the best results.
- Applied the Brier score system to measure forecast accuracy, manipulate conditions, and automate Brier score calculations for diverse scenarios.
- Modified open-source models for mass production of Brier scores, ensuring compatibility with our research parameters and enhancing efficiency.
- Tested four different state combinations in models to spot differences in results.
- Research Proposal - [LINK](#) (available on my webpage)

NEC Corporation India, NOIDA, IN
SWE Intern

June - Sep 2024

- Worked on the Logistics Data Bank(LDB) and Unified Logistics Interface Platform(ULIP).
- Developed a fleet management system using ULIP APIs.
- Coded the system using Python, Java, SQL, HTML/CSS.
- Led a team of interns, conducting reviews, setting targets, and testing code.

PROJECTS

Super Health App

Feb 2024

Winner - SparkHacks 2024

- Made a Python-based personal health assistant with multiple aggregated features (Doctor's catalog and prescription manager).
- Integrated a search engine based on an inverted matrix approach using maps.
- Utilized Tkinter to create the GUI for the app, which was connected to a database using Sqlite3.

BNF SimpleC Parser

Apr 2024

- Developed an F# program to parse SimpleC using recursive-descent parsing.
- Checked SimpleC for semantic errors: variable definitions and type correctness.
- Built a symbol table for variable declarations, checked type compatibility, and issued warnings.

Chicago Lobbyist Database

Mar 2024

- Developed console-based database app in Python using N-tier design, integrating SQLite.
- Focused on Chicago lobbyists, employers, clients, and compensation for data management.
- Implemented functions for data access and object mapping tiers, testing, and handling database interactions.

Assembly Attack Lab

Apr 2024

Solved All Phases

- Explored five attacks on vulnerable programs, focusing on buffer overflows and stack manipulation.
- Developed and executed exploit strategies, enhancing understanding of program vulnerabilities.
- Achieved successful string argument injection, showcasing an understanding of security weaknesses and exploitation techniques.

EXPERTISE

Languages/Frameworks: Python, C/C++, R, Java, C#, F#, OCaml, Assembly, Git, Vim, Valgrind, SQL, Shell

Database: MySQL, SQLite3, MongoDB

Courses: Data Structures, Language and Automata, Machine Organization, Programming Languages & Compilers

ACHIEVEMENTS

- Dean's List - FA 22, SP 23, FA 23, SP 24
- Crowd Favorite @ SparkHacks 2024