

Abhishek Ray

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EDUCATION

University of Southern Mississippi

Bachelor of Science in Computer Science

– GPA: 4.0 SAT: 1470

Hattiesburg, MS

Jan 2024 – Dec 2027

PROJECTS

A Data-Driven Research Study on Undergraduate Enrollment Decline at USM

(Link)

- Analyzed 10 years of Common Data Set (CDS) enrollment data to uncover racial and demographic shifts at USM.
- Benchmarked USM trends against peer institutions and examined correlations with tuition, financial aid, and admissions metrics.
- Published findings via GitHub Pages

Flight Management System

(Link)

- Created using C++ and AVL Trees for efficient data storage and retrieval.
- Enabled passengers to book, update, or cancel tickets.
- Created a dynamic seat map for visualization.

Personal Portfolio Website

(Link)

- Built with HTML, CSS, and JavaScript to showcase projects and skills.
- Responsive design for mobile and desktop devices.
- Hosted on DigitalOcean for fast, reliable performance.

EXPERIENCE

CSCE Ambassador

Jan 2025 – Present

USM, School of Computing Sciences and Computer Engineering

Hattiesburg, MS

- Assist incoming and prospective students by explaining CSCE majors, career paths, department culture, and available opportunities.
- Provide campus tours and facilitate informational sessions on academic programs, research opportunities, and student resources.

GIS Trainer

2023

NYCAGG Project (EU-funded)

Janakpur, Dhanusha

- Trained volunteers to use GIS-enabled mobile app for collecting geo-tagged data on waste and roadside garbage to support community-driven environmental monitoring.
- Collaborated with a core team to visualize collected data, generate insights, and support research efforts aimed at influencing local environmental governance and policy.

TECHNICAL SKILLS

Languages: Python, C++, JavaScript

Data Analysis: NumPy, Pandas, Matplotlib (beginner)

Frameworks: React, Node.js

Databases: SQLite

Developer Tools: Git, GitHub, VS Code

Concepts: OOP, Data Structures and Algorithms

HONORS & AWARDS

Top 7 Finalist, Accelerate Smart Cities Innovation Challenge 2023 at George Mason University: research project on extracting valuable substances from industrial waste streams using advanced tech. [Link]

Top 10 Finalist, Tapojärvi Innovation Challenge 2023 organized by the European Institute of Innovation and Technology: for same project

President's List (4.0 GPA in 2nd & 3rd semester), Dean's List (1st semester)

Academic Excellence Full Scholarship — Covered tuition, housing, and meals

Course Certification — Introduction to Mathematical Thinking, Stanford University [Link]