Sandesh Bhattarai

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Professional Summary

Curious and passionate Computer Science student with a strong foundation in mathematics, driven by a love for problem-solving and logic. Recognized for creativity and determination in tackling challenges, I excel at exploring unique methods to decode complex problems. With deep engagement in diverse fields—ranging from data structures and algorithms to web design and machine learning—I am currently channeling my broad interests into a thesis on the impact of AI technologies on quantum computing and cryptography. Eager to apply my analytical skills and innovative mindset in an environment that values fresh perspectives and dedicated effort.

Education

Bachelor of Science in Computer Science

The University of Southern Mississippi, Mississippi, USA
Expected Graduation: May 2026

- Minor: Mathematics, Economic Data Analysis
- GPA: 4.00
- Scholarships & Honors:
  - Full Tuition and Housing Scholarship
  - Honors Keystone Award
  - President's List (Jan 2023 - Present)

Skills

Programming	Python, C++, JavaScript, TypeScript, Go, SQL
Web Development	HTML, CSS, React, Next.js, Node.js
Database	MySQL, MongoDB, Oracle
Technology	Linux/Unix, Git, Docker, Blockchain
Soft Skills	Strong verbal and written communication, Effective presentation skills

Courses

Data Structure and Algorithm	Cybersecurity	Machine Learning
DBMS Design	Secure Software Development	Economic Data Analysis

ACADEMIC PROJECT

Acadney, Web Development | *May 2024*

- Developed a blogspot website enabling students to post their academic works as blogs.
- Implemented responsive design and content management features, resulting in a platform that fosters academic collaboration.

Workmate, Web Application | *Jan 2024 – March 2024*

- Designed and developed a web application using React and Node.js to manage and allocate tasks, showcasing strong problem-solving and analytical skills.
- Applied data analysis techniques to optimize task scheduling, which reduced overall completion time by 20%.

Adaptive Security System Research on Cybersecurity | *Feb 2024 – March 2024*

- Conducted research on advanced adaptive security systems aimed at enhancing cybersecurity measures.
- Analyzed various cybersecurity threats and developed strategies to mitigate risks using adaptive security frameworks.
- Collaborated with a team to design and implement security techniques adaptable to evolving cyber threats.
- Presented findings at the Undergraduate Research Symposium, University of Southern Mississippi (July 2024)

Honors Thesis: The Impact of AI Technologies on the Growth of Quantum Computing and Cryptography | *Expected Completion: [Dec 2024]*

- Conducting an in-depth study on how AI technologies can influence and accelerate the development of quantum computing and cryptographic methods.
- Exploring the potential synergies between AI and quantum computing, with a focus on enhancing security protocols and computational efficiency.
- Analyzing current research and developments in the field to project future trends and applications.
- Aiming to contribute original insights into the intersection of AI, quantum computing, and cryptography, with potential implications for both academia and industry.

Additional Information

Volunteer, Mathematics Initiatives in Nepal | *Aug 2021 – Dec 2022*

- Led a group to inspire young students to explore mathematics, volunteering over 150 hours and reaching more than 1500 students across 30+ schools in Kathmandu Valley.
- Successfully organized workshops and sessions, significantly enhancing students' interest and performance in mathematics.

Vice-President, Nepalese Student Association | The University of Southern Mississippi | Jan 2024 – Present

- Led the Nepalese Student Association, organizing and managing cultural celebrations, academic workshops, and social activities to engage over 200 members.

- Coordinated with team members and university administration to ensure smooth execution of events, promoting collaboration, and adhering to timelines and budgets.