

Saurav Ghimire

East Baton Rouge, LA | (225) 508-5940 | [Email](#) | [LinkedIn](#) | [Portfolio](#)

EDUCATION

Louisiana State University (LSU), Baton Rouge, LA

May 2025

Masters, Computer Science

GPA: 4.0/4.0

Tribhuvan University (TU), Kathmandu, Nepal

Nov 2021

Bachelors, Computer Science

GPA: 3.6/4.0

PROFESSIONAL EXPERIENCE

Graduate Research Assistant

Aug 2023 – May 2025

Louisiana State University (LSU), East Baton Rouge, LA

- Designed and trained deep learning models to develop interatomic potentials for molecular dynamics simulations.
- Conducted large-scale simulations using LAMMPS and high-performance computing resources to model atomic behavior.
- Analyzed model performance through force and energy prediction accuracy, structural metrics, and dynamic properties.
- Automated end-to-end simulation and analysis workflows using Python, enhancing research efficiency and reproducibility.

Software Engineer

Apr 2022 – Aug 2022

Cedar Gate Technologies, Kathmandu, Nepal

- Developed scalable backend components to enhance multi-platform software functionality.
- Built interactive front-end features to improve user interface responsiveness and user experience.
- Optimized SQL queries and database architecture, improving overall application performance and data retrieval speed.
- Collaborated with QA teams to identify, debug, and resolve software issues, reducing issue resolution time.

SKILLS

Programming Languages: Python, C++, C#, Java, JavaScript, R, SQL, HTML/CSS

Data Science & Machine Learning: Pandas, NLP, Unsupervised Learning, Reinforcement Learning, Bayesian Optimization, Vision Transformer, Convolutional Neural Networks

Databases & Backend: MySQL, PostgresRDBMS, Tomcat

Cloud & DevOps: AWS, Git

Systems & Tools: Linux/Unix, High Performance Computing (HPC), Excel/Numbers/Sheets