

DEVANG BHAGAT

Louisville, KY | devang.bhagat@louisville.edu | (502) 299-9141 | [Website](#)

SUMMARY

Computational materials scientist with expertise in density functional theory (DFT), machine learning for materials discovery, and high-performance computing (HPC). Experienced in studying transition metal oxides, defect dynamics, and electronic structure analysis. Passionate about leveraging computational techniques to solve real-world scientific challenges. Additionally, skilled in web development, creating dynamic and user-friendly interfaces for research and data visualization

EDUCATION

University of Louisville

Candidate for Ph.D. in Mechanical Engineering

Louisville, KY

Expected December, 2025

M.S. in Mechanical Engineering

December, 2019

University of Mumbai

B.E. in Automobile Engineering

Mumbai, India

August, 2016

SKILLS

Programming Languages: Python, HTML, Latex, JavaScript (beginner), React Native (beginner)

Software: VASP, Wannier90, Lobster, TRIQS, MATLAB, SolidWorks, MS Word, MS Excel, MS PowerPoint

Languages: English (fluent), Hindi (national), Marathi (native), Gujarati

RESEARCH EXPERIENCE

University of Louisville

Graduate Research Assistant

Louisville, KY

August 2020 – Present

- First-principles investigation of thermodynamics and electronic transitions in vacancy-ordered rare-earth perovskite nickelates (P1)
- First-principles investigation of Role of B site in rare-earth perovskites nickelates. (P2)
- Investigating pseudocapacitive properties of LaMnO_3 and SrMnO_3 with oxygen intercalation. (P3)

PROFESSIONAL EXPERIENCE

Ixia Solutions

Content Writer

Mumbai, India

2016 – 2017

Core member of the mathematics teams

- Designed rigorous formative assessments for students.
- Conducted internal and external review fixes for questions constructed.
- Completed packaging of overall product including various topics per state guidelines.

PUBLICATIONS

3 first author. 4 co-authors. 2 first author manuscript under preparation.

CERTIFICATIONS

IBM Data Science Professional Certificate (In Progress)

VOLUNTEER & ACTIVITIES

- Note taker for Disability Resource Center at University of Louisville
- Mover for Student Housing in University of Louisville
- Fraternity member of Lambda Chi Alpha
- Designed a website [Around the Ville](#)