

# DEVANG BHAGAT

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

## SUMMARY

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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

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### 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

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**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

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### University of Louisville

Graduate Research Assistant

Louisville, KY

August 2020 – Present

- Performed Density Functional Theory (DFT) calculations to analyze material properties, leveraging computational modeling techniques.
- Developed and optimized Python scripts to automate data extraction, preprocessing, and workflow automation, improving efficiency.
- Applied data analysis and visualization techniques to interpret research findings and presented insights to advisor and colleagues.

## PROFESSIONAL EXPERIENCE

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### 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.
- Co-related each question to its corresponding topic and previous understanding required by student.
- Completed packaging of overall product including various topics per state guidelines.

## PUBLICATIONS

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

## CERTIFICATIONS

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Machine Learning Specialization by Andrew Ng (In Progress)

## VOLUNTEER & ACTIVITIES

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