NINAD WADHAVE

BS-MS Biological Sciences
Indian Institute of Science Education and Research Bhopal
Bhopal, India

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RESEARCH OBJECTIVE

I aim to conduct Master's research in evolutionary genomics, shifting my focus from phenotypic observation to the molecular drivers of adaptation. My interest lies in using computational tools (Python/R) to investigate how genetic variation arises and persists within populations. I seek to contribute my quantitative background to a rigorous research group while gaining training in bioinformatics and population-level analysis."

EDUCATION

- **BS-MS in Biological Sciences (Dual Degree)**
  Indian Institute of Science Education and Research (IISER), Bhopal — May 2027

RESEARCH & PROJECT EXPERIENCE

- **Project Intern | Ecological Impacts of ALAN**
  Guide: Dr. Maria Thaker
  Indian Institute of Science (IISc) — May 2025 - July 2025
  Bangalore, India
  - Contributed to and executed field experiments to assess the ecological impacts of Artificial Light at Night (ALAN) on Peninsular rock agama (*Psammophilus dorsalis*).
  - Conducted standardized quantitative behavioural sampling and managed handling of live organisms under ethical protocols.
- **Project Intern | Pollen Diversity and Avian Behaviour**
  Guide: Dr. Vinita Gowda
  Tree Lab, IISER Bhopal — Dec 2024
  Bhopal, India
  - Worked as an intern assisting on projects related to pollen diversity and avian behaviour.
  - Included behavioural experiments on Purple Sunbirds using artificial-flower arrays to test nectar-volume discrimination and quantify foraging decisions.
- **Project Intern | Water-Contaminant Remediation**
  Guide: Dr. Surya Singh
  ICMR-NIREH — May 2024 - July 2024
  Bhopal, India
  - Investigated water-contaminant remediation using natural biosorbents, successfully achieving ∼70% pollutant removal efficiency.
- **Reading Project Intern | Ecological Trade-offs**
  Guide: Dr. Meghna Krishnadas
  CSIR-CCMB — Dec 2023
  Hyderabad, India
  - Conducted an extensive critical literature review on the ecological trade-offs between plant herbivory defense and pollinator interactions.
- **Course Project: Evolutionary Ecology**
  IISER Bhopal — [Semester Project]
  - Developed a computational simulation model for avian vocalizations to study evolutionary patterns in bird song frequency and modulation.

- Implemented the simulation framework using Python/R, demonstrating application of quantitative methods.

- **Course Project: Behavioural Cognition**
  IISER Bhopal
  - Led a behavioural-cognition study ($n = 150$), overseeing experimental design, data collection, and statistical evaluation.

TECHNICAL SKILLS

- **Computation & Code**
  R (Basic), Python (Pandas, NumPy), C++ (Basic)
- **Analysis & Modeling**
  Statistical Hypothesis Testing, Regression Analysis, Bio-acoustic Modeling
- **Geospatial Tools**
  QGIS (Habitat mapping, Spatial analysis)
- **Field Techniques**
  Standardized Ecological Sampling, GPS Logging, Behavioural Observation
- **Laboratory**
  Filtration Assays, Contamination Control, Specimen Handling

ACHIEVEMENTS & FELLOWSHIPS

- **Selected Research Intern**
  IISc Bangalore (Competitive Selection)
- **NTSE Scholar**
  National Talent Search Examination - Awarded by Govt. of India
- **Gold Medalist**
  Science and Math Olympiad