

Suyash Sawant

Integrated BS-MS student

Bird Lab,

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Education:

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| 2017-2022 | Integrated BS-MS dual degree Bachelor of Science - Master of Science (Biology major) Indian Institute of Science Education and Research(IISER) Tirupati, Andhra Pradesh, India. (ongoing) | 6.8/10 CGPA |
| 2015-2017 | 12th Std. (Higher Secondary School Certificate Examination) Sanjay Ghodawat Junior College, Kolhapur, Maharashtra, India. | 81.5% |
| 2006-2015 | 10th Std. (Secondary School Certificate Examination) R. B. Shirke High School, Ratnagiri, Maharashtra, India. | 91.7% |

Internships and Projects:

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| Dec 2020 - May 2021 (ongoing) | Studying the evolution of song complexity as a trait in Old-world Flycatchers using phylogenetic analysis (Short Project) <ul style="list-style-type: none">❑ Adviser: Dr. V. V. Robin, Assistant Professor at Indian Institute of Science Education Research, Tirupati, Andhra Pradesh, India.❑ Studied the evolution of multiple song traits including the song complexity using BioGeoBears aimed to understand why certain birds evolved to have highly complex songs. |
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Aug 2019 -
March 2021

Quantifying birdsong complexity for the birds with a highly variable vocal repertoire (Project)

- ❑ Adviser: Dr. V. V. Robin, Assistant Professor at Indian Institute of Science Education Research, Tirupati, Andhra Pradesh, India.
- ❑ Assessed conventional measures of birdsong complexity and developed a new complexity measure to incorporate the intra-song variability.
- ❑ Checked the performance of the new method with songs of multiple species across the world.

May 2019 - July
2020

Classifying and monitoring calling patterns in dusky palm squirrel *Funambulus sublineatus* in Palni hills (Project)

- ❑ Adviser: Dr. Nandini Rajamani, Assistant Professor at Indian Institute of Science Education Research, Tirupati, Andhra Pradesh, India.
- ❑ Analyzed focal recordings of *F. sublineatus* to understand the diversity in vocalizations using various sound classification techniques.
- ❑ Compared various sound detection techniques for passive acoustic monitoring of *F. sublineatus* in Kodaikanal, Tamil Nadu.

June 2019 - July
2019

Training on new tools and techniques in Bioacoustics at Cornell Lab of Ornithology (Internship)

- ❑ Adviser: Dr. Holger Klinck, Director, Center for Conservation Bioacoustics, Cornell Lab of Ornithology, Ithaca, New York, USA.
- ❑ Learned various techniques in the detection and classification of acoustic data using Raven Pro.

Aug 2018 - Dec
2019

Morphometric variation in southern flying squirrel *Glaucomys volans* (Project)

- ❑ Adviser: Dr. Nandini Rajamani, Assistant Professor at Indian Institute of Science Education Research, Tirupati, Andhra Pradesh, India.
- ❑ Used Geometric and Traditional Morphometrics to check for possible Sexual Size Dimorphism in *G. volans* using the x-ray images

June 2018

Understanding moth diversity in the rainforests of Arunachal Pradesh (Internship)

- ❑ Adviser: Dr. Ramana Athreya, Associate Professor at Indian Institute of Science Education Research, Pune, Maharashtra, India.
- ❑ Learned techniques in collecting and photographic moths to understand diversity.
- ❑ Extensive fieldwork in the dense rain forests of West Kameng, Arunachal Pradesh.

May 2018 &
May 2019

Bioacoustics fieldwork in the Shola forests of Kodaikanal (Internship)

- ❑ Adviser: Dr. V. V. Robin, Assistant Professor at Indian Institute of

- Science Education Research, Tirupati, Andhra Pradesh, India.
- ❑ Learned the basics of bioacoustic techniques and fieldwork in ecology.
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Technical Skills:

Analytic skills:

- ❑ Bioacoustics analysis techniques- processing of sound recordings and sound classifications (Raven, Kaleidoscope, warbleR, Raven)
- ❑ Passive acoustic monitoring (Song Meter 4, Swift) - detection and classification
- ❑ Morphometric analysis - tps, MorphoJ, geomorph
- ❑ Basic Phylogenetic analysis - Mega, RAxML, Geneious
- ❑ Basic Programming - R, Fortran, MATLAB, Python

Field skills:

- ❑ Mist-netting, Bird-ringing, and taking measurements
 - ❑ Collection of acoustic data - focal and automated recorders
 - ❑ Biodiversity monitoring and survey: Have a good grasp on species identification of Birds, Mammals, Moths, and Butterflies
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Publications:

Research Articles:

2021

[Spectrogram cross-correlation can be used to measure the complexity of bird vocalizations.](#) (Under review in 'Methods in Ecology and Evolution'.) (bioRxiv: <https://doi.org/10.1101/2021.03.30.437665>). **Suyash Sawant**, Chiti Arvind, Viral Joshi, V. V. Robin

Other Articles :

2019

[Grasshopper Warbler *Locustella naevia* in Andhra Pradesh.](#) Indian BIRDS vol. 15 no. 2(June 2019). **Suyash G. Sawant**

Grants:

2019

Travel grant from IISER-Cornell Bioacoustics Workshop for an internship at Cornell Lab of Ornithology for two months \$500

Workshops and Conferences:

- ❑ 3rd National Symposium on Avian Biology(NSAB 2021) at Gurukula Kangri, Haridwar, UK, India
- ❑ National Conference on Citizen Science for Biodiversity(CitSci India 2020) -virtual conference
- ❑ virtual International Statistical Ecology Conference 2020(vISEC2020) - virtual conference
- ❑ 2nd National Symposium on Avian Biology(NSAB 2019) at IISER Tirupati, AP, India.
- ❑ Training in Bioacoustics by Cornell Lab of Ornithology, Wildlife Acoustics, and IISER Tirupati at IISER Tirupati, AP, India.
- ❑ 42nd Annual Conference and National Symposium on Animal Behaviour at Calicut University, KL, India.

Presentations:

2021

- ❑ [Spectrogram cross-correlation can be used to measure the complexity of bird vocalizations](#) **Suyash Sawant**, Chiti Arvind, Viral Joshi, V. V. Robin. (March 2021, online talk at 3rd National Symposium on Avian Biology at Gurukula Kangri, Haridwar, UK, India)

2020

- ❑ [Influence of citizen science drives in documenting the moth diversity of India.](#) Harsha Kumar, Senan D'Souza, **Suyash Sawant**, Viral Joshi, Nandini Rajamani. (September 2020, Poster presentation at National Conference on Citizen Science for Biodiversity - virtual)
- ❑ [Evolution and significance of signaling traits in squirrels.](#) Nivetha M, **Suyash Sawant**, Amira S, Shijisha AC, Nandini Rajamani. (February 2020, Poster presentation at Bio-day at IISER Tirupati, AP, India)
- ❑ [Bioacoustics to explain birdsong complexity and bird diversity.](#) Chiti Arvind, Harikrishnan CP, Amrutha Rajan, **Suyash Sawant**, Shomita Mukharjee, P Jeganathan, Viral Joshi, V. V. Robin. (February 2020, Poster presentation at Bio-day at IISER Tirupati, AP, India)

2019

- ❑ [Defining birdsong complexity in a species with a highly variable vocal repertoire.](#) **Suyash Sawant**, Chiti Arvind, Viral Joshi, V. V. Robin. (December 2019, Poster presentation at 2nd National Symposium on Avian Biology at IISER Tirupati, AP, India)
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Additional Information:

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| 2020-present | Membership: Association of Avian Biologist in India |
| 2018-2021 | Student Coordinator of Birding and Trekking Club, IISER Tirupati |
| 2020 | Part of Coordinating team for 'VIVANTE', Science and Cultural Fest of IISER Tirupati |

Personal Information:

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| DOB | 5th December 1998 |
| Languages | English, Marathi, Hindi |
| Hobbies | Drawing and Painting Indian Classical Music - Harmonium and Harmonica Sports - Football, Athletics, Kho-Kho |

References:

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Nandini Rajamani, PhD
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