ADHITH M K

An ecological researcher specializing in Ecological Informatics with a strong foundation in Wildlife Conservation and Management. Currently pursuing a Master's in Ecology at Kerala University of Digital Sciences, Innovation and Technology, combining ecological knowledge with modern computational approaches. Experienced in biodiversity assessment and field research, with technical proficiency in R, Python, and GIS. Passionate about using data-driven approaches for wildlife conservation, ecosystem restoration, and sustainable development, seeking opportunities to contribute to innovative research projects in ecological science.

Broad Interests

Wildlife Conservation and Management, Ecosystem Restoration, Sustainable Development.

Specific Research Interest

Acoustic Ecology, Ecological Informatics, Animal Behaviour, Species Interaction, Remote Sensing.

EDUCATION

Kerala University of Digital Sciences, Innovation and Technology

Thiruvananthapuram, Kerala

Master of Science in Ecology with specialization in Ecological Informatics

Aug. 2023 – Present

Shivaji College, University of Delhi

Bachelor of Science in Zoology

Jun 2019 - Mar 2022

Farook Higher Secondary School

Science (Biology)

Kozhikode, Kerala Jul. 2017 – Mar. 2019

PROJECTS / HACKATHON

Bird Species Identification with Regional Custom CNN Model for Evaluating Restoration Success in the Northern Western Ghats Landscape

Jan. 2025

Delhi

- As a Shillim Institute Conservation Fellow, I spearheaded a project on bird species identification using a custom ResNet50-based CNN model to evaluate restoration success in the Northern Western Ghats' Pavana Dam Catchment. Employing AudioMoth devices across 22 sites, I analyzed the distributions of 14 bird species, achieving 92.95% model accuracy. This work correlated acoustic data with habitat types, advancing conservation strategies through ecological informatics.

Smart India Hackathon, 2024

September 2024

- As part of the Smart India Hackathon, an initiative by the Ministry of Education's Innovation Cell, our team tackled a problem statement from the Punjab Skill Development Mission (PSDM), Government of Punjab, focusing on Smart Education within the Software category. We designed and developed a freelancing platform that seamlessly connects freelancers with employers and provides tools for efficient project management. Through this project, I gained handson experience in building web applications and front-end design.

LULC Change Using Geospatial Techniques in Kannoth Padam, Thrissur

Jun. 2024

- Analyzed land use and land cover change in Kannoth Padam, Thrissur, Kerala, from 2014 to 2024. Utilized high-resolution satellite imagery and advanced geospatial techniques to assess the spatial distribution of five primary land cover categories: villages, mountains, rocks, crops, trees, and rivers.

Additional Certifications

Ecology: Ecosystem Dynamics and Conservation

- Completed the course offered by the American Museum of Natural History on Coursera, scoring 80%.

Animal Behaviour and Welfare

- Completed the course offered by the University of Edinburgh on Coursera, scoring 82%.

English Composition I

- Completed the course offered by Duke University on Coursera, scoring 100%.

Large Marine Ecosystems: Assessment and Management

- Completed the course with honors, offered by the University of Cape Town, NOAA, GEF, UNDP, UNESCO-IOC, and United Nations Environment Program on Coursera, scoring 95.10%.

R Programming

- Completed the course offered by Johns Hopkins University on Coursera, scoring 91%.

Introduction to Generative AI

- Completed the course offered by Google Cloud on Coursera, scoring 100%.

Extra-Curricular Activities

National Service Scheme

- Actively participated in the National Service Scheme for two years, completing 240 hours of service and attending a seven-day special camp.

Junior Red Cross

- Completed training as a Junior Red Cross 'C' level cadet, attending a one-day session on Road Safety and First Aid in 2016.

She-Skill

- Developed a prototype app, SheSkill, to empower women in the Vizhinjam fishing community by providing skill development resources and raising awareness about ocean conservation and illegal fishing activities.

Quit One Challenge

- Volunteered in the Quit One Challenge organized by the School of Informatics, Digital University Kerala, promoting sustainability among students and faculty.

Aaranyakam

- Contributed to the event organizing and designing team for Aaranyakam, an eco-fest hosted by the School of Informatics in collaboration with the Student Council of Digital University Kerala.

AWARDS / ACHIEVEMENTS

Shillim Institute Conservation Fellowship

Jan. 2025

- Secured the Shillim Institute Conservation Fellowship during my Master's program to support dissertation research. Developed a CNN model for detecting pre-trained species in soundscape audio recordings using a supervised learning framework, customizable for specific target species, to enhance conservation efforts.

University Level Sports

- Mixed Doubles Table Tennis: 1st Place, University Level Intramural House Competitions, 2024
- Volleyball: 2nd Place, University Level Intramural House Competitions, 2024
- 4x400 m Relay: 3rd Place, University Annual Athletics Meet, 2024
- Men's Cricket: 3rd Place, University Level Intramural House Competitions, 2024

Technical Skills

Programming Languages: Python, R, LaTeX

Developer Tools: MS Office, Google Workspace, Tableau

Other: Generative AI, GIS, Statistical Analysis, ArcGIS, Deep Learning

SOFT SKILLS

Scientific Writing, Communication, Critical Thinking, Leadership, Presentation, Event Organizing, Time Management.

FIELD EXPOSURE

Bird and Butterfly Survey

- Had the privilege of participating in a field visit to the Dry Thorn Forest of Tirunelveli, organized by the Ashoka Trust for Research in Ecology and the Environment (ATREE). Gained valuable insights into species identification and data collection techniques.

Wetland Species Assessment

- Contributed to an ongoing research project documenting species diversity in the wetland ecosystem of the DUK campus, coordinated by the School of Informatics at Digital University Kerala, to create a comprehensive biodiversity inventory.

Acoutic data collection

- During my project at Pavana Dam, I got an opportunity to collect acoustic data of both degraded and restored habitats in that area.

LANGUAGES

English: Professional Working Proficiency **Hindi:** Professional Working Proficiency

Malayalam: Native Proficiency Tamil: Speaking Proficiency

References

Dr. Athira K

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Dr. I Suresh

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