

Anoob prakash

PostDoctoral Research Associate

- ▶ Purdue University
- ▶ Forestry and Natural Resources

Skills

Data Analysis	10 years
R	8+ yrs.
Python	2 yrs.
UNIX	7 years

Education

2018 - 2025

Ph.D. Plant Biology

University of Vermont

2011 - 2014

MSc. Tree Physiology and Breeding

Kerala Agricultural University

Tools

- ▶ Git
- ▶ RStudio
- ▶ VS Code
- ▶ Terminal

Contact

- 📍 Indiana, USA
- 📞 +1 802 777 6768
- ✉ anoobvinu@gmail.com
- 🏠 anoobvinu07.github.io
- 🌐 github.com/anoobvinu07
- 📄 publications

Summary

Highly skilled researcher with expertise in ecological and evolutionary genomics, plant biology, climate change and bioinformatics. Experienced in analyzing large-scale genomic data, conducting climate change adaptation studies, and teaching advanced scientific concepts. Adept at both independent and collaborative research in academic and non-academic settings.

Experience

Post Doctoral Research Associate

01/2026 - Present

Department of Forestry and Natural Resources
Purdue University

- Application of machine-learning approaches to investigate climate pre- or mal-adaptation for species with high restoration potential (SHRP)
- Identifying seed sources for regeneration planting in zones of mal-adaptation.

Ph.D. Candidate

2018 - 2025

Department of Plant Biology
University of Vermont

- Led interdisciplinary teams in collecting and managing large, multi-year field datasets; applied genome-wide association studies (GWAS), Bayesian methods, and bioinformatics to identify loci underlying range-wide adaptation.
- Applied molecular and machine learning approaches to investigate the role of introgression in local adaptation, identifying adaptation patterns to inform conservation strategies for fragmented populations.

Graduate Research Intern

2021 & 2022

The Nature Conservancy (TNC)

- Pioneered the integration of genomic data into restoration planning, setting a precedent for collaborative, science-based decision-making between researchers and land managers.
- Guided landscape-scale restoration using genomics, helping plant 58,000 seedlings and establish 38 monitoring plots across 255 acres in partnership with NGOs.

Selected publications

Applications in Plant Science (2024). **Bringing genomics to the field: An integrative approach to seed sourcing for forest restoration.**

Ecological Monographs (2023). **Novel genomic offset metrics integrate local adaptation into habitat suitability forecasts and inform assisted migration.**

Philosophical Transactions: Biological Sciences (2022). **Genotypic variation and plasticity in climate-adaptive traits after range expansion and fragmentation of red spruce (*Picea rubens* Sarg.).**

Fellowship

GradCAMP Climate Scholar | 2023-2024 | USDA & West Virginia State University

NSF Research Trainee under Quantitative and Evolutionary STEM Training (QuEST) | 2018-2023 | University of Vermont