TIANJIAN QIN

Theoretical Biologist

📞 +31 62-721-5049
✉ tianjianqin@outlook.com
🌐 qtj.me
📍 Netherlands

My journey began with marine biology and expanded through academic excursions into ecology and evolution. I traveled across 18 provinces in China during my master's program to witness biodiversity firsthand. Then, my interest in theoretical research led me to pursue doctoral studies in phylogenetics and diversification models, aiming to understand global biodiversity patterns through stochastic processes. Now, having explored ecological and cultural diversity in 37 countries, I firmly believe in grounding theory in reality, striving to bridge empirical research with theoretical frameworks through innovative approaches.

EDUCATION

PhD Candidate   University of Groningen | 2019 - 2024

Studying systems biology and evolution, using stochastic diversification models and machine learning techniques to understand global biodiversity patterns.

Master of Science   Beijing Forestry University | 2016 - 2019

Conducted field surveys and greenhouse experiments to study wetland ecology and invasive species, supplemented by geographical and phylogenetic analyses.

Bachelor of Science   Nanjing Normal University | 2012 - 2016

Explored marine biology with a strong interest in ecology and evolution, laying the foundation for advanced studies.

RECENT PROJECTS

Identifying Evolutionary Forces Shaping Phylogenies   University of Groningen | 2023 - 2024

Tianjian Qin, Koen van Benthem, Luis Valente, Rampal Etienne

Manuscript in progress
Investigate whether we can identify evolutionary forces shaping phylogenies by leveraging neural networks to perform parameter estimation and evolutionary scenario classification.

Parameter Estimation from Phylogenetic Trees Using Neural Networks   University of Groningen | 2022 - 2023

Tianjian Qin, Koen van Benthem, Luis Valente, Rampal Etienne

Submitted to Systematic Biology
Explore performance and robustness of neural network approaches for estimating diversification parameters from phylogenetic trees, using ensemble learning strategies.
DOI: https://doi.org/10.1101/2024.08.02.606350

Impact of Evolutionary Relatedness on Species Diversification   University of Groningen | 2019 - 2022

Tianjian Qin, Luis Valente, Rampal Etienne

Submitted to Journal of Theoretical Biology
Develop a new birth-death model demonstrating how evolutionary relatedness influences species diversification dynamics at different scales.
DOI: https://doi.org/10.1101/2023.11.09.566365

Predicting wetland community resistance to *Alternanthera philoxeroides* invasion   Beijing Forestry University | 2018 - 2019

Tianjian Qin, Jian Zhou, Yan Sun, Heinz Müller-Schärer, Fangli Luo, Bicheng Dong, Hongli Li, Feihai Yu

Published on Plant Biology
Investigate whether phylogenetic diversity is a better proxy than species richness in terms of explanatory power of predicting local wetland plant community's resilience to invasive species.
DOI: http://doi.org/10.1111/plb.13101

SKILLS

Technical

R

C/C++

Python

HTML/CSS/JS

Bash/UNIX

TeX/TikZ

GIS/Bioinformatics

SUPERVISORS

Rampal Etienne
University of Groningen
2019 - Present

Luis Valente
Naturalis Biodiverstiy Center
2019 - Present

Hongli Li
Beijing Forestry University
2016 - 2019

AWARDS

CSC-RUG Joint Scholarship (2019)

LANGUAGES

Chinese (Native)

English (Fluent)

Dutch (Read/Write)

German (Read/Write)

INTERESTS

Photography

Travel

Learn everything

🐙 github.com/EvoLandEco   in linkedin.com/in/tjqin   R⁶ researchgate/Tianjian-Qin