

Yangkang Chen (陈昉康)

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GitHub: <https://github.com/chenyangkang>

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EDUCATION

- PhD 2024-2029 (expected) **Doctor of Philosophy in Ecology, Evolution & Conservation Biology, University of Illinois Urbana-Champaign, US**
Program in Ecology, Evolution & Conservation Biology
Advisor: Benjamin M. Van Doren
- MS 2021-2024 **Master in Ecology, Institute of Zoology, Chinese Academy of Sciences, China**
Key Laboratory of Animal Ecology and Conservation Biology
- GPA: 3.82/4.0. **Advisor: Xiangjiang Zhan**
Thesis: "Using citizen science big data of bird observation to study biodiversity spatiotemporal pattern and mechanism"
- MS 2021-2023 **Master of Applied Data Science, University of Michigan, Ann Arbor**
School of Information
- GPA: 4.0/4.0
Leading Project: "Predicting and Clustering Bird Migration Patterns Across America continent"
Leading Project: "Price Recommender Web Application for New Properties on Airbnb"
- BS 2017-2021 **Bachelor of Science, major in Ecology, Sichuan University, China**
School of Lifescience
- GPA: 3.86/4.0, ranked 1st in the major. **Advisor: Kangshan Mao**
Thesis: "The Revelation of Genomic Breed Composition Using Target Sequence Capture and SNPs: a case of Taxodium"
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AWARDS & SCHOLARSHIPS

- 2024 Illinois Distinguished Fellowship, University of Illinois Urbana-Champaign
- competitive; ~20 awards per year university-wide
- 2024 Excellent Student of University of Chinese Academy of Sciences
- 2021 Excellent Graduate of Sichuan University (*summa cum laude*)
- 2020 Special Scholarship of College of Life Sciences, Sichuan University
- competitive; top 1 in College of Life Sciences
- 2020 Good Doctor Scholarship, College of Life Sciences, Sichuan University
- competitive; top 10% in College of Life Sciences.
- 2019 National Scholarship, Ministry of Education of the People's Republic of China
- competitive; top 1% in College of Life Sciences
- 2019 Excellent Student of Sichuan University
- 2018 Excellent Student of Sichuan University
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PUBLICATIONS

6. **Chen, Y.**, Gu, Z., & Zhan, X., Tracking Temperature over Green-up: Sensitivity Discrepancy Between Observable and Fitness-Decisive Environments in Migratory Birds (under review).

5. Zhang, W., Gu, Z., **Chen, Y.**, Zhang, R., & Zhan, X. (2024). Birds migrate longitudinally in response to the resultant Asian monsoons of the Qinghai-Tibet Plateau uplift. bioRxiv, 2024-10 (under review). [\[Link to the paper\]](#)
4. Han, Z., **Chen, Y.**, Dai, X., Yu, C., Cheng, J., Li, J., & Mao, K. (2024). The revelation of genomic breed composition using target capture sequencing: a case of Taxodium. *Forestry Research*, 4, e034. [\[Link to the paper\]](#)
3. **Chen, Y.**, Gu, Z. & Zhan, X. (2024). stemflow: A Python Package for Adaptive Spatio-Temporal Exploratory Model. *Journal of Open Source Software*, 9(94), 6158. [\[Link to the paper\]](#)
2. Shao, Z., Hou, X., **Chen, Y.**, Lin, Z., & Zhan, X. (2023). RNA sampling time on postmortem avian carcasses in the wild. *Wildlife Biology*, e01157. [\[Link to the paper\]](#)
1. **Chen, Y.**, Wang, Y., Li, J., Wang, W., Feng, D., & Mao, K. (2021). Principles, error sources and application suggestions of prevailing molecular dating methods. *Biodiversity Science*, 29(5), 629. [\[Link to the paper\]](#)

PROJECTS & TOOLS

- 2023 stemflow: A package for Adaptive Spatio-Temporal Exploratory Model (AdaSTEM) in python
 GitHub repository: <https://github.com/chenyangkang/stemflow>
- 2022 MADS Milestone project: Predicting and Clustering Bird Migration Patterns Across American continent. GitHub repository: https://github.com/chenyangkang/MADS_Milestone2_Bird_Migration
- 2023 MADS Capstone project: Price Recommender Web Application for New Properties on Airbnb. GitHub repository: https://github.com/foye501/Capstone_GMT89
- 2023 Fasta2Codeml: A codeml pipeline wrapper for easier natural selection analysis.
 GitHub repository: <https://github.com/chenyangkang/Fasta2Codeml>
- 2023 PooledPSMC: Auto-PSMC with individual pooling method.
 GitHub repository: <https://github.com/chenyangkang/PooledPSMC>

CONFERENCE & WORKSHOP

Talk

- 2024 Nov 27-29 Modelling workshop for the Life Euro Bird Portal (EBP) project (45min, virtual).

PROFESSIONAL & ACADEMIC SERVICES

- 2024 Sep – PEEC seminar student committee, PEEC program, UIUC.
 2023 Feb – 2024 Feb Host of Journal club for group of population evolutionary genetics, IOZ, CAS.

FIELD WORK

- 2021 Feb Saker Falcon Breeding Ecology Survey
 - Qinghai, China
- 2020 Jul Summer Community Survey of Lepidoptera in Lixian County **[Team Leading]**
 - Lixian, Sichuan, China
- 2020 May Bird Community Survey: 10 Counties in Western Sichuan Province
 - Sichuan, China
- 2019 Oct Insect Community Survey in Pingwu County
 - Pingwu, Sichuan, China

2019 Jun Rodent Community Survey in Chengdu
- Chengdu, Sichuan, China
2019 Jun-Jul Field Research for Ecology Major [**Team Leading**]
- Leshan, Sichuan, China

LANGUAGES

Python, R, Shell, English, Chinese, Japanese