# Yunyi Shen

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BLOG https://yunyishen.ml

#### EDUCATION

Period August 2018 — Current

Degree Master of Science in Wildlife Ecology

Institute University of Wisconsin-Madison Madison, USA

Period November 2019 — Current
Degree Master of Science in Statistics

Institute University of Wisconsin-Madison Madison, USA

Period August 2014 — July 2018

Degree Bachelor of Science in Integrated Science/Biophysics

Institute Peking University Beijing, China

# RESEARCH PROJECTS

Period January 2019 —

Advisor Tim Van Deelen, Brian Yandell UW Madison

TITLE Spatial Explicit Occupancy Modeling of Canidae Species in

Apostle Islands, WI USA

Develop MRF based model account for interspecies interaction and

spatial autocorrelation simultaneously.

Period October 2018 —

Advisor Tim Van Deelen, Dwayne Etter UW Madison

Title Managing White-tailed Deer Under a Newly Evolving Paradigm: A Demonstration of the Effects of Density-

Dependence

Developing integrated population model for white tailed deer popula-

tion reconstruction.

Period October 2017 — August 2018

Advisor Sheng Li Peking University

TITLE Diversity Pattern of Pheasants in China

Distribution modeling of 67 species of pheasants. Land use is the

strongest single variable explaining richness across landscape.

Period October 2016 — October 2017

Advisor Sheng Li Peking University

TITLE Distribution Mapping of Asiatic Black Bear

Distribution modeling of black bear using data from multiple sources with various spatial resolutions. Developing method for data fusing.

#### **Publications**

#### Year **2019**

- [1] Yunyi Shen, Mingzhang Liu, Dajun Wang and Sheng Li "Identify critical knowledge gap and conservation needs of threatened large mammal through high-resolution mapping: case of Asiatic Black Bear, China" (in prep)
- [2] Xiaoyun Shi, **Yunyi Shen** and Sheng Li "Mapping the current distribution of chrysolophus pheasants (*C. pictus* and *C. amherstiae*) to determine the range of potential hybridization" (*in prep*)

#### Year **2018**

[1] Jianping Yu, **Yunyi Shen**, Xiaoyou Song, Xiaonan Chen, Sheng Li and Xiaoli Shen "Evaluating the effectiveness of the functional zones for the protection of black muntjac (*Muntiacus crinifrons*) in the Qianjiangyuan National Park" *Biodiversity* (in Chinese)

# Conference Presentations and Posters

### Year **2017**

[1] Yunyi Shen, Dajun Wang, Sheng Li "Identify critical knowledge gap and conservation needs of Asiatic Black Bear through high-resolution mapping" *Chinese Chapter of SCB Annual Conference 2017* Best graduate student presentation award

#### Year **2016**

[1] Jinlin Chen, Xier Chen, Haowen Liu, **Yunyi Shen**, Yichao Zeng, Lijie Yin "Biodiversity survey in Chongzuo examined effects of the white-headed langur (*Trachypithecus leucocephalus*) as a flagship species on habitat conservation" Conservation of China's Tropical Diversity (Poster)

# R Packages

TITLE ReCAP

Description Reconstruction of Culled and Aerial counted Populations. Integrated population model used to reconstruct population dynamics using culling and aerial count data, available on GitHub (but not cran yet).

# TITLE SparseIsingSampler

DESCRIPTION Sampling method for Ising model with sparse graph structure, available on GitHub (but not cran yet).

#### Professional Positions

Period January 2019 — December 2019

EMPLOYER Qianjiangvuan National Park Zhejiang China

TITLE Statistical Specialist

Black muntjac population and distribution modeling

Period **June 2017** — **July 2018** 

EMPLOYER Peking University Biology Museum Beijing China

TITLE Docent

Science communication manuscript writing, automatic guiding system

construction, guide visitors

# Outreach Positions

Period **2016** 

EMPLOYER Bo Wu (Chinese National Geography Magazine) Beijing China

TITLE Editor

Edit science communication manuscripts

## Grants

Period November 2018 — November 2019

AGENCY Institute of Zoology, Chinese Academy of Science

TITLE Basic ecology of black muntjac Statistical specialist

Amount \$10,000 in total, with 3 other collaborators

# AWARDS AND SCHOLARSHIPS

Year **2019** 

AWARD Conservation Leader for Tomorrow Scholarship IL U.S.A.

Year **2017** 

AWARD Annual Award in Social Works Peking University

Year **2015** 

AWARD Second Award in Jiang Zehan Cup of Modeling Beijing, China

Year **2013** 

AWARD Silver Medal in Chinese Chemistry Olympiad Beijing, China

# Teaching

Semester Fall 2019

Institute UW Madison

COURSE General Chemistry (CHEM 103) TA

Semester Spring 2019

Institute UW Madison

COURSE General Chemistry (CHEM 104) TA

| Semester  | Spring 2018                                |            |
|-----------|--|------------|
| Institute | Peking University                          |            |
| Course    | ESL for Non-Academic Staffs                | Instructor |
| Semester. | Fall 2017 & Fall 2016                      |            |
| Institute | Peking University                          |            |
| Course    | Evolution of Human Intelligence            | TA         |
| Semester  | Spring 2016                                |            |
| Institute | Peking University                          |            |
| Course    | Undergraduate Seminar in Genetics          | TA         |
| Semester  | Summer 2015 & Summer 2014                  |            |
| Institute | Xi'an No.1 (2015)/Tieyi (2014) High School |            |
| Course    | Chinese Chemistry Olympiad (CChO)          | Instructor |