Yunyi Shen

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EDUCATION

PERIOD	**November 2019 — Current**	
DEGREE	**Master of Science, Statistics**	
INSTITUTE	**University of Wisconsin-Madison**	Madison, USA
PERIOD	**August 2018 — Current**	
DEGREE	**Master of Science, Wildlife Ecology**	
INSTITUTE	**University of Wisconsin-Madison**	Madison, USA
PERIOD	**August 2014 — July 2018**	
DEGREE	**Bachelor of Science, Integrated Science/Physical Biology**	
INSTITUTE	**Peking University**	Beijing, China

RESEARCH PROJECTS

PERIOD	**May 2020 —**	
ADVISOR	**Claudia Solis-Lemus**	UW Madison
TITLE	**Sparse Graph Reconstruction with Composition data**	
	Developed Bayesian method for LASSO type auto-regression model with logistic-multinomial response	
PERIOD	**January 2019 — May 2020**	
ADVISOR	**Tim Van Deelen**	UW Madison
TITLE	**Spatial Explicit Occupancy Modeling of Canidae Community in Apostle Islands, WI USA**	
	Develop Ising based model account for interspecies interaction and spatial autocorrelation simultaneously.	
PERIOD	**October 2018 — May 2020**	
ADVISOR	**Tim Van Deelen, Dwayne Etter**	UW Madison
TITLE	**Population Reconstruction of White Tailed Deer under Intensive Harvest**	
	Developing integrated population model for white tailed deer population reconstruction, formalized as `R` package `ReCAP`. Shinyapp for selective harvest simulation see here.	

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   **2020**
[1] **Yunyi Shen** and Timothy R. Van Deelen. "Spatially Explicit Modeling of Community Occupancy using Markov Random Field Models with Imperfect Observation: Mesocarnivores in Apostle Islands National Lakeshore." *BioRxiv* (under review of *Ecological Modelling*,2020).

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   **2020**
[1] **Yunyi Shen** Dwayne Etter, Tim Van Deelen, "Age structure effects and population control in urban/suburban white-tailed deer, Chicago, IL 1992-2006" *2020 Midwest Fish and Wildlife Conference*

YEAR   **2019**
[1] Dwayne Etter, John Humphreys, Tim Van Deelen, Gary Roloff, **Yunyi Shen** "Managing White-tailed Deer Under a Newly Evolving Paradigm: A Demonstration of the Effects of Density-Dependence" *2019 annual TWS Conference*

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	**Re**construction of **C**ulled and **A**erial counted **P**opulations. Integrated population model used to reconstruct population dynamics using culling and aerial count data, available on GitHub.

TITLE	`IsingOccu`	
DESCRIPTION	Occupancy model using Ising model as occupancy and detection process, available on GitHub.	

PROFESSIONAL POSITIONS

PERIOD	**January 2019 — December 2019**	
EMPLOYER	**Qianjiangyuan National Park**	Zhejiang China
TITLE	**Modeling 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	

AWARDS AND SCHOLARSHIPS

YEAR	**2020**	
AWARD	Finalist of Janice Lee Fenske Memorial Award	IL U.S.A.
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