# Jiong Wang

jiongw22@gmail.com | (678) 427-4518

#### **EDUCATION**

Coding Boot Camp, UC Irvine, CA

Jun. 2022 - Present

Curriculum: HTML, CSS, JavaScript, jQuery, Node.js, MySQL, ORM, MVC, MongoDB, PWA, React, MERN

Georgia Institute of Technology, Atlanta, GA

Aug. 2019 - Dec. 2021

Master of Science in Biology | GPA 3.66/4.0

Course: Intro to Computing (Python), Object Oriented Programming (Java), Linear Algebra

Shandong University, Weihai, China

Sep. 2015 - Jun. 2019

Bachelor of Science in Biological Sciences | GPA: 87.78/100, ranking top 3%

### **PUBLICATION**

**J. Wang**, Q. Xu, X. Yang, L. Jiang. In Prep. Copper Oxide Nanoparticles, Not Copper Ion, Constrained Bacterial Community Assembly.

Liu, J., Liu, F., Ren, T., **Wang, J.**, Yang, M., Yao, Y., and Chen, H. (2021), Fabrication of Fish Gelatin/Sodium Alginate Double Network Gels for Encapsulation of Probiotics. *J Sci Food Agric* 

# PROJECT EXPERIENCE

### Bark Movie

- Built a full-stack web application where users can review and rate movies
- Established frontend view engine using handlebar, HTML, CSS, and JavaScript
- Designed RESTful APIs with Node.js to handle HTTP requests and responses; implemented CRUD routes
- Designed user and activity database using MySQL; deployed the application on Heroku

#### **Break Hub**

- Built a virtual break room application for individuals who procrastinate to give them a space to address their yearning to disengage in procrastinating behaviors and use their time efficiently
- Designed and realized the timer feature using HTML, CSS, and JavaScript
- Retrieved data from server-side APIs (Cat API and GIPHY)

# RESEARCH EXPERIENCE

# The Impact of CuO Nanoparticles on Bacterial Community Assembly Sep. 2020 - May 2021

- Assessed the effect of copper oxide nanoparticles on similarities between communities subjected to different assembly histories, including designing and executing the experiment
- Analyzed abundance data with an ANOVA, Tukey's HSD test, and generalized linear model
- Evaluated community structure change with PERMANOVA and PERMDISP
- Applied R to perform analysis

# The drivers of spatial abundance variation of *Plethodon cinereum* Jan. 2020 - May 2020

- Quantified the effects of environmental factors on *Plethodon cinereum* spatial abundance variation
- Selected key variables from 25 factors by combining principal component analysis (PCA) and the general linear model with backward selection
- Generated a predicted future distribution map of *Plethodon cinereum* using ArcGIS and Maxent

- Cleared occurrence data using MySQL
- Performed data analysis using R

# Geographical genetic differentiation of *Apodemus agrarius* in China Oct. 2018 - May 2019

- Evaluated the genetic differentiation of Apodemus agrarius in China via DNA analysis
- Extracted Apodemus agrarius mitochondrial DNA cytochrome b
- Amplified DNA with PCR
- Executed genetic analysis on sequence data using DnaSP and constructed a haplotype network with Network
- Built two ultrametric trees using the Bayesian and maximum likelihood approaches and reconstructed the Bayesian phylogeny using BEAST

### PROFESSIONAL EXPERIENCE

# Client Support Representative, Momopet

Dec. 2021 - Present

- Customized product solutions for 1500+ clients
- Proposed and built the US-wide volunteer pickup system that increased company turnover by 20% in 45 days

# Teaching Assistant, Georgia Tech

Jun. 2021 - Aug. 2021

- Delivered educational support to the students in the Scientific Foundation of Health course
- Performed teaching assistant expectations including checking assignments and final projects of 80+ students
- Held a one-hour information session for the final project

### Research Assistant, Georgia Tech

Jun. 2020 - May 2021

Primary Investigator: Dr. Lin Jiang

- Supported the National Science Foundation (NSF) funded research: Experimental Assessment of the Long-term and Evolutionary Consequences of Engineered Nanoparticles in close collaboration with the PI
- Designed and conducted bacterial experiment
- Independently analyzed bacterial community dynamics data and wrote the annual NSF report

# Teaching Assistant, Georgia Tech

Jan. 2020 - May 2020

- Aided students in the Experimental Design & Statistical Methods course
- Graded assignments and exams of 91 student
- Hosted weekly 3-hour office hours and held 3 recitations

### **SKILLS**

• R, Python, Java, MATLAB, HTML, CSS, JavaScript, Bootstrap, jQuery, Node, Express, MySQL, NoSQL, React, Git

# **HONORS & AWARDS**

- Honored Graduate, Shandong University, 2019/06
- Undergraduate Research Award, Shandong University, 2018/04
- Distinguished Leadership Award, Shandong University, 2017/10
- Merit Student Scholarship, Shandong University, all Academic Years