

**YUJI SAIKAI**

<https://yujisaikai.com>

[yuji.saikai@gmail.com](mailto:yuji.saikai@gmail.com)

## **UNIVERSITY OF WISCONSIN-MADISON**

### **Office Contact Information:**

427 Lorch St. #317, Madison, WI, 53706  
(608) 571-9556

### **Undergraduate Studies:**

Bachelor of AgriCommerce, Massey University, New Zealand, 2011–2013  
Bachelor of Economics (Honours), the Australian National University, Australia, 2014

### **Graduate Studies:**

Complex Systems Summer School, Santa Fe Institute, 2017  
Ph.D. in Agricultural & Applied Economics with minor in Computer Science, University of Wisconsin–Madison, 2020 (expected)

### **References:**

Paul Mitchell  
(in Agricultural Economics)  
418 Taylor Hall  
(608) 320-1162, [pdmitchell@wisc.edu](mailto:pdmitchell@wisc.edu)

Vivak Patel  
(in Statistics)  
1241 Medical Sciences Center  
(608) 262-2539, [vivak.patel@wisc.edu](mailto:vivak.patel@wisc.edu)

Shawn Conley  
(in Agronomy)  
355 Moore Hall  
(608) 262-7975, [spconley@wisc.edu](mailto:spconley@wisc.edu)

Sheldon Du  
(in Agricultural Economics)  
331 Taylor Hall  
(608) 262-0699, [xdu23@wisc.edu](mailto:xdu23@wisc.edu)

### **Research Fields:**

Computational modeling

- Machine learning
- Bayesian optimization
- Agent-based modeling

Applications

- Agricultural systems
- Precision agriculture

### **Teaching Experience:**

Lecturer in AAE722 Machine learning in applied economic analysis, Summer 2019  
Teaching assistant in AAE706 Applied risk analysis, Spring 2019

### **Research Experience:**

Research assistant, 2015–Present

**Presentations:**

Agricultural & Applied Economics Association (AAEA) Annual Meeting, 2017–2019  
NCERA 180 Precision Agriculture Technologies for Food, Fiber, and Energy Production, 2019  
ASA-CSSA-SSSA International Annual Meeting, 2019

**Research Papers:**

*“An efficient algorithm for learning site-specific management in high-dimensional precision agriculture”* (in progress)  
(with Vivak Patel and Paul Mitchell)

*“Adaptive experimental design using Bayesian optimization to improve the cost efficiency of small plot field trials”*  
(with Vivak Patel, Lucía Gutiérrez, Brian Luck, Jed Colquhoun, Shawn Conley, and Paul Mitchell)

*“An agent-based model of insect resistance management and mitigation for Bt maize: A social science perspective”*  
(with Paul Mitchell and Terrance Hurley)

*“A bandit algorithm for efficient on-farm research”*  
(with Paul Mitchell)

*“An agent-based model for promoting modest technologies”*

*“An impure public good model of local food systems: Aggregative games of four locals”*