Bo Pang

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Research/Teaching Specialization

Climate Adaptation and Land Use Planning; Geospatial Analysis and Planning Support Systems; Landscape and Human Health; Ecosystem Services and Biodiversity Conservation; Coastal Resilience; Green Infrastructure and Geodesign.

Education

PhD, Landscape Architecture, University of Illinois Urbana–Champaign (UIUC), 2026

Dissertation: "Evidence to implementation: translating environmental science into actionable design strategies for climate adaptation and mitigation in water-centric landscapes."
Advisor: Prof. Brian Deal
Minor: Urban Planning

Master of Landscape Architecture, UIUC, 2020

B.A., Film & Television Photography/Production (minor: TV Editing & Directing), Communication University of China, 2017

Academic Appointments

Postdoctoral Research Associate, Department of Landscape Architecture, UIUC, 2026–Present

Supervisor: Prof. William C. Sullivan

NIH-funded multisite study on neighborhood green infrastructure and heat-related health risks among older adults
Role: Chicago Site Coordinator / Lead for Chicago field implementation

Land Use Evolution and Impact Assessment (LEAM) Lab, UIUC**,** 2020–Present
Associate Director, 2025–2026

Supervisor: Prof. Brian Deal

Conduct research for the Illinois Natural and Working Lands initiative, with a focus on wetland carbon, ecosystem services, biodiversity conservation, and statewide climate planning. Led wetland ecosystem accounting and spatial analyses to support conservation priorities.

Teaching Assistant & Lead Instructor, LA 437 Regional Design Studio, UIUC, Fall 2023 &2024

Research Assistant, Smart Energy Design Assistance Center (2020–2024)

Conducted on-site energy assessments and building energy benchmarking for Illinois municipalities; developed online energy code training content; performed GIS-based spatial analysis supporting municipal climate action planning

Publications

Research spans climate adaptation, geodesign, coastal resilience, wetland ecosystems, and landscape–health relationships.

Peer Reviewed

Pang, B., & Deal, B. (2026). Translating Fragmented Wetland Evidence into Consistent Spatial Metrics for Planning: An Ecosystem Accounting Framework for Assessing Wetlands from a Multi-Scalar Perspective. Sustainability, 18(15), 8013.

Pang, B., & Deal, B. (2026). From Model Outputs to Planning Layers: A Planning Support Workflow for Differentiated Coastal Adaptation in Dalian, China. *Land, 15*(7), 1218.

Pang, B., & Deal, B. (2025). Integrating Land-Use Modeling with Coastal Landscape Interventions: A Framework for Climate Adaptation Planning in Dalian, China. Sustainability, 18(1), 370.

Pang, B., & Deal, B. (2025). Bridging Design and Climate Realities: A Meta-Synthesis of Coastal Landscape Interventions and Climate Integration. Land, 14(9), 1709.

Pang, B., & Deal, B. (2024). Wetland Carbon Dynamics in Illinois: Implications for Landscape Architectural Practice. Sustainability, 16(24), 11184.

Pang, B., & Deal, B. (2024). A Review on the Use of Geodesign Processes in Managing Flood Vulnerability. Land, 13(6), 723.

In Progress

Pang, B., Lemon K., & Deal, B. (projected 2026). *Carrying Evidence into Design: Translation Infrastructure for Water-Centric Landscape Architecture.* Manuscript planned for *Sustainability*, Special Issue "Sustainable Engineering: Bridging Waste Management, Circular Economy, and Climate-Resilient Design."

Pang, B., Deal, B., & Sullivan, W. C. (projected 2026). *Nature-Based Solutions for Climate-Related Mental Health and Well-Being: A Systematic Review of Landscape and Spatial Evidence.* Review manuscript planned for *Academia Mental Health and Well-Being*.

Pang, B., & Deal, B., (projected 2026). *How Coastal Flood Modeling and Land Availability Shape Simulated Development in Dalian, China.* Manuscript planned for *Hydrology*, Special Issue "Advancing Flood Detection, Monitoring & Simulation: Integrating Machine Learning, Remote Sensing & Hydrodynamic Model."

Pang, B., & Deal, B., (projected 2026). *An Intelligent Multi-Criteria Decision-Making Framework for Prioritizing Green Infrastructure Interventions in Coastal Cities under Sea Level Rise Uncertainty: The Case of Dalian, China.* Manuscript planned for *Sustainability*, Special Issue "Intelligent Multi-Criteria Decision Making for Sustainable Futures."

Pang, B., & Deal, B. (projected 2027). *The Role of AI in Sentient Landscape Planning Support Systems.* Book chapter for AI for Civil Engineering, Architecture, and the Built Environment: An Integrated Engineering Approach, *Elsevier/Woodhead* Publishing.

Conference Presentations

Pang, B. (2026, November). *Condition-Adjusted Wetland Ecosystem Accounting for Nutrient Reduction and Watershed Planning: A Statewide Illinois Framework Applied to the Lake Michigan Basin.* Accepted poster presentation, 2026 State of Lake Michigan Meeting.

Pang, B. (2026, October). *Differentiating coastal growth space through planning-support adaptation zoning for Dalian, China.* Individual paper presentation accepted for the Association of Collegiate Schools of Planning 66th Annual Conference, Pittsburgh, PA.

Pang, B. (2026, March). *From scenarios to sections: A parameter framework for sea level rise–responsive design.* Oral presentation, CELA 2026 Annual Conference, Cincinnati, OH.

Teaching Experience

LA 437 Regional Design Studio, University of Illinois Urbana-Champaign
Lead Instructor, Fall 2024 | 5 credit senior studio, 18 students
Teaching Assistant, Fall 2023 | 5 credit senior studio, 17 students

LA 437 in FALL 2024: Evidence-Based Design Toward & Beyond Urban Resilience — Lead Instructor, UIUC
(5-credit senior studio; 18 students)

- Organized the 2024 studio, Evidence-Based Design Toward & Beyond Urban Resilience, around the International Geodesign Collaboration framework.
- Developed and taught ArcGIS Pro labs in stormwater analysis, heat vulnerability mapping, tree canopy assessment and others.
- Guided students from regional analysis and scenario evaluation to design interventions for underserved Chicago neighborhoods. Used demonstrations, desk critiques, and design reviews to help students connect environmental evidence with the location, scale, and performance of their proposals.

Guest Instruction and Academic Service

Abstract Reviewer, Council of Educators in Landscape Architecture (CELA) Annual Conference, 2027 (2026)

Peer Reviewer, Frontiers, reviewed three journal manuscripts, 2026

Scheduled Guest Lecturer, UP 433 Introduction to Environmental Planning Theory and Practice., Lecture: "Wetlands in Environmental Planning: From Ecosystem Services to Conservation.", Michigan State University, November, 2026

Guest Instructor, LA 437 Regional Design Studio, UIUC, Fall 2026. Delivered three Module 2 GIS lab sessions supporting students' regional analysis. UIUC, 2026

Jury Member, LA 437 Regional Design Studio, UIUC, 2025

Guest Lecturer and Jury Member, LA 537 Regional Planning Studio, UIUC, 2022

Courses Prepared to Teach

Design Studios at foundational, advanced, urban, and regional scales; Geospatial Methods for Landscape Architecture using ArcGIS Pro, R, and Python; Geodesign studio; Ecological Design; Green and Blue Infrastructure and Climate Adaptation; Environmental Planning; Urban Planning, Design, and Equity; Research Design and Methods.

Honors & Awards

Conference Travel Scholarship, Landscape Architecture Executive Fund, UIUC (2026)

Sigma Lambda Alpha Honor Society, Psi Chapter (2020)

ASLA National Honor Award: Student Collaboration (2019) — "Before the City, There Was the Sand: Designing Rainwater in Calumet City for a Resilient Calumet TERRAIN"

Professional Memberships & Service

Ph.D. Student Representative, UIUC Department of Landscape Architecture (2022)

American Society of Landscape Architects (ASLA)

International Geodesign Collaboration (IGC)