

WE'RE HIRRING! JOIN OUR RESEARCH GROUP AS A

JOIN OUR RESEARCH GROUP AS A POSTDOCTORAL RESEARCHER ON ADVANCED MODELING!

The postdoctoral researcher will engage in advanced research focused on evaluating reverse logistics for reusable packaging to meet EU circularity requirements for U.S. specialty crop exports as part of the US Department of Agriculture's (USDA) Technical Assistance for Specialty Crops (TASC) Program. The successful candidate will lead and conduct independent research on mathematical modeling and simulation, perform data analysis, and contribute to the development of decision-support tools and manuscripts for publication. The role involves close collaboration with the Principal Investigator (PI), project partners the International Fresh Produce Association and Reusable Packaging Association, and other research team members at the University of Florida.

Qualifications

- A Ph.D. in Industrial Engineering, Systems Engineering, Operations Research, Applied Mathematics, or a closely related discipline.
- Strong background in AI, machine learning, network design, and systems modeling.
 - Experience with mathematical modeling, simulation, and optimization in supply chain logistics.
 - Familiarity with digital twin technologies

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Key responsibilities

- Develop mathematical models and simulations to enhance understanding and contribute to the improvement of circular packaging systems, including reverse logistics, as part of the global circular supply chains.
- Conceptualize and develop digital twins applied to food systems
- Conduct independent research on reverse logistics and sustainable packaging for U.S. specialty crops.
- Develop and test decision-support tools using artificial intelligence (AI), machine learning, optimization, and other relevant systems modeling techniques.
- Analyze data related to the economic viability, carbon footprint, and labor implications of reusable packaging supply chains.
- Prepare research manuscripts for publication in peer-reviewed journals.
- Assist in the preparation of grant proposals and reports on related topics.
- Present research findings at national and international conferences.
- Mentor graduate and undergraduate students involved in the project.
- Collaborate with researchers within the lab, department, and industry partners.

Qualifications

- Proficiency in software tools such as Python, R, MATLAB, or similar for AI and simulation tasks.
- Experience in sustainable packaging, reverse logistics, or developing digital decision-support tools.
- Experience in sustainability assessments, e.g., life-cycle assessment (LCA), techno-economic analysis (TEA)
- Previous experience in mentoring
- Familiarity with the European Union's Circular Economy Action Plan and packaging regulations.

Compensation and application

- Compensation: This is a full-time, grant-funded, 24-month position with the possibility of extension based on performance and funding availability. The salary is competitive and includes a benefits package.
- Application Deadline: The review of applications will begin in September 2024 and continue until the position is filled. Please apply via https://go.ufl.edu/jobboz
- For further inquiries about the position, please contact Dr. Ziynet Boz, ziynetboz@ufl.edu

The Institute of Food and Agricultural Sciences is committed to creating an environment of inclusive excellence that affirms diversity across a variety of dimensions, including ability, class, ethnicity/race, gender identity and expression. Inclusive excellence is the active process of including and respecting everyone as we strive for excellence and equitable outcomes in all we do at the University of Florida. We particularly welcome applicants who can contribute to such an environment through their scholarship, teaching, mentoring, and professional service. We strongly encourage historically underrepresented groups to apply. Hiring is contingent upon eligibility to work in the US. The University of Florida is a public institution and subject to all requirements under Florida Sunshine and Public Record laws. If an accommodation due to a disability is needed to apply for this position, please call 352-392-2477 or the Florida Relay System at 800-955-8771 (TDD) or visit Accessibility at UF.









