

March 8, 2025

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1405 S Harrison Rd, Room 101J  
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Dr. Andrew Short  
Chair, Search and Screen Committee  
University of Florida  
Entomology and Nematology Department  
1881 Natural Area Drive  
Gainesville, FL 32611

Dear Dr. Andrew Short and other members of the Search and Screening Committee,

I am writing to express my strong interest in the Professor and Chair position in the Agricultural and Biological Engineering Department at the University of Florida. With a deep commitment to cultivating professionals, generating and sharing knowledge, and advancing the application of engineering, science, and management principles, I am eager to lead and collaborate with faculty, staff, and stakeholders to enhance the department's impact. My experience in academic leadership, faculty development, interdisciplinary research, and external partnerships has prepared me to foster innovation, secure funding opportunities, and strengthen the department's teaching, research, and extension programs. I am particularly drawn to this opportunity because of the Agricultural and Biological Engineering Department's strong reputation for integrating engineering solutions with agricultural, biological, and land and water resource challenges. In the following sections, I will outline how my leadership philosophy and professional experiences uniquely position me to support the department's continued success and growth.

### **Qualifications:**

Over nearly three decades, I have cultivated a record of outstanding scholarly achievement and professional activities in teaching, research, and extension that underscores my dedication to advancing knowledge and delivering tangible benefits to society. My pioneering work as a watershed modeler—recognized by agencies such as USAID, USDA, NSF, NRCS, USGS, TNC, and USEPA—has produced cutting-edge decision-support systems and optimization tools that integrate both human and natural water demands, a focus reflected in numerous accolades. In recent years, I have been named an Honorary Member by the American Water Resources Association for “acknowledged eminence in a branch of water resources science” and received the Rudolph Hering Medal from ASCE's Environmental and Water Resources Institute for groundbreaking research on large-scale PFAS modeling. Multiple high-impact papers have been featured among the most widely read and cited, while additional honors—from the Michigan State University (MSU) College of Agriculture and Natural Resources Established Researcher Award to the IEEE World Congress on Computational Intelligence best paper distinction—highlight the breadth and relevance of my scholarly contributions. Equally central to my academic mission is the consistent excellence I strive for in the classroom, which has led to outstanding Student Instructional Rating System evaluations and recognition, such as the Withrow Teaching Excellence Award. My commitment to mentorship, acknowledged in the 2024 University Outstanding Faculty Mentor Award from the MSU Graduate School, extends beyond students to junior faculty, strengthened by a two-tier mentoring program that fosters future leaders in academia and industry alike. At the same time, my extension and outreach activities—from serving as a Watershed Modeling Specialist to collaborating on statewide water quality improvement initiatives—translate scientific insights into practical strategies that enhance social and economic equity. These endeavors have garnered recognition from entities like the USEPA, which acknowledges my best management practice auction method as an emerging tool for conservation implementation. By harmonizing research innovation, inspiring education, and engaged scholarship, I have forged a legacy of

excellence that not only advances environmental science and policy but also empowers communities to navigate pressing resource challenges.

Throughout my career, I have held a variety of administrative positions, most notably serving as Director of the Institute of Water Research and the Center for Intelligent Water Resources Engineering, experiences that collectively highlight my capacity to lead and manage complex academic units engaged in teaching, research, and extension activities. At the Institute of Water Research, I oversee a portfolio of approximately \$25 million in current funding, supporting 16 projects across the State of Michigan that address critical water resource challenges through science-based technology, applied research, educational programs, and robust partnerships. This extensive reach has allowed me to facilitate interdisciplinary, grant-funded initiatives that unite faculty spread throughout the state, ensuring that local stakeholders benefit directly from cutting-edge knowledge and practical solutions. Our commitment to teaching is evident in our collaboration with affiliates to develop joint certification programs that integrate curricula and foster knowledge-sharing across North America while at the same time enhancing extension outreach through workshops and statewide conferences on diverse water management topics. These undertakings have demanded a high degree of administrative and managerial skill—not only in coordinating large, interdisciplinary teams but also in securing external support through developmental activities and engagement with a wide range of agencies, private entities, and philanthropic donors. Equally significant, my leadership of the Center for Intelligent Water Resources Engineering exemplifies the ability to cultivate a shared vision among 22 faculty members with expertise spanning surface and subsurface hydrology, hydrodynamic and contaminant transport modeling, aquatic ecology, crop modeling, computational optimization, machine learning, and remote sensing. Through five core focus areas—data collection, artificial intelligence, computational resources, modeling applications, and communication and decision-making—the Center for Intelligent Water Resources Engineering seeks to be a global leader in balancing water use and conservation for both human and natural needs. Under my directorship, we have built a vibrant, collaborative environment that attracts competitive grants and engages with policymakers, community organizations, and industry partners. Such sustained interaction with external stakeholders—from local producers to federal agencies—demonstrates my strong ability to work collegially and effectively at all levels. By blending administrative acumen, interdisciplinary engagement, robust fundraising efforts, and stakeholder collaboration, I have developed a proven track record of directing diverse academic units that deliver high-impact teaching, research, and extension outcomes at a major Land-Grant university.

### **Professional Responsibilities and Achievements:**

Throughout my career, I have built a robust record of excellence across research, teaching, and extension, distinguished by substantial grant portfolios, impactful publications, dedicated mentorship, and recognized leadership in outreach. As a University Research Foundation Professor for over 15 years in the Departments of Biosystems and Agricultural Engineering and Plant, Soil, and Microbial Sciences, I developed a strong international profile—leading projects funded at more than \$20 million across over 10 countries in Africa, Southeast Asia, and South America, contributing to a cumulative grant total of \$44 million. My research efforts, reflected in 156 peer-reviewed publications with over 6,000 citations and an h-index of 39, center on innovative models and decision-support systems aimed at enhancing water quality, agricultural sustainability, and ecosystem resilience, exemplified by comprehensive water quality impact studies that have influenced bioenergy policies at national and international levels. In parallel, I have demonstrated a deep commitment to teaching and mentorship through advising 14 PhD and 16 Master's students—many of whom have received prestigious accolades—attests to a sustained dedication to fostering the next generation of scholars. In the realm of extension, I was honored with the USDA CSREES Partnership Award for Mission Integration for my work on the Integrated Watershed Restoration and Protection Strategies (WRAPS) Team at Kansas State University, reflecting my commitment to forging tangible, community-driven solutions. Beyond these core responsibilities, I have contributed to the broader academic community as Associate Editor of the *Journal of Hydrology: Regional Studies*, Managing Editor of *Environmental Modelling and Software*, and Conference Chair for the 12th International Congress on

Environmental Modelling and Software. Accolades with many national and international awards further underscore the scope and impact of my accomplishments while highlighting my capacity to collaborate with diverse stakeholders and cultivate interdisciplinary partnerships to advance academic, research, and extension missions.

### **Administrative and Management Philosophy:**

My administrative and management philosophy has been shaped by various leadership roles spanning department-, college-, and university-level responsibilities, all of which emphasize transparent decision-making, equitable processes, and a deep commitment to assisting and respecting colleagues. At the departmental level, I was elected to serve as Chair of the Department Advisory Committee for five years, during which I spearheaded the revision of our bylaws and led the establishment of annual evaluation criteria designed to foster high performance and consistency among faculty. As Graduate Director, I orchestrated an overhaul that doubled the number of graduate students in our program, secured over \$100K to renovate and modernize their offices, launched a new retention fund to support stellar students, and acquired supplemental funding for those affected by the COVID-19 pandemic. The success of these initiatives was rooted in ongoing dialogue with both faculty and students, along with a climate survey that revealed areas needing improvement and helped ensure that all voices were heard.

My directorship roles at the Institute of Water Research and the Center for Intelligent Water Resources Engineering further illustrate my collaborative, results-driven management style. At the Institute of Water Research, I provide programmatic direction that aligns research, education, and outreach with local, state, and federal priorities while nurturing partnerships beyond campus. Similarly, leading the Center for Intelligent Water Resources Engineering has enabled me to build synergies among diverse faculty members for four colleges, bolstering MSU's national and international reputation in intelligent water resources engineering.

Beyond these departmental contributions, my service on the College of Agriculture and Natural Resources Leadership Team under the Senior Associate Dean for Research has been equally pivotal. In this role, I have engaged in high-level strategic discussions that directly influence how resources are allocated, how the college responds to unforeseen challenges—such as pandemic disruptions and budget cuts—and how major decisions align with broader institutional priorities. By collaborating with peers and administrators on large-scale planning, I have gained a wider perspective on the intricate interplay among individual department goals, college-level constraints, and external factors affecting the university. This college-wide vantage has deepened my appreciation for proactive planning, rapid adaptation to shifting circumstances, and thoughtful communication—skills that enable me to tackle departmental challenges with a clear sense of how local decisions fit into a larger academic and fiscal ecosystem.

In all these capacities, I have sought to function as a “boundary spanner,” connecting departmental expertise with external stakeholders—alumni, industry, government agencies, and community organizations—to advance mission-critical teaching, research, and extension activities. Guided by principles of transparency, uniformity, assistance, and respect, I have found that constructive communication and genuine attentiveness to differing perspectives are vital to cultivating a positive departmental culture. By actively listening, setting clear expectations, and providing resources that empower faculty and staff, I strive to reinforce a supportive climate where accomplishments are recognized and challenges are addressed in a fair, forward-looking manner. Through experiences ranging from securing graduate fellowships and fundraising for essential facilities to shaping strategic plans and forging interdisciplinary partnerships, I have become adept at balancing day-to-day operational demands with the longer-term vision that department chairs must provide.

### **Leadership Vision and Growth Strategy for Research, Teaching, and Extension:**

My overarching goal is to cultivate a departmental community where every member feels heard, supported, and inspired to excel. I plan to achieve this by blending strategic foresight with inclusive processes—

ensuring we remain responsive to urgent challenges while building a foundation that encourages faculty, staff, and students to innovate. This vision begins with transparent communication: sharing budget realities, performance expectations, and long-term goals so our department can adapt swiftly yet thoughtfully to shifting institutional and external conditions. I believe that treating colleagues with respect—valuing diverse perspectives and providing consistent support—creates an environment where high teaching, research, and extension standards can thrive. From a management standpoint, fostering synergy across disciplinary boundaries is paramount: harnessing our collective expertise while forging new collaborations that align with the evolving needs of industry, government, and community partners. This approach not only drives impact in research and outreach but also empowers the next generation of scholars and professionals through high-quality educational experiences. By anchoring these efforts in rigorous planning, active listening, and a commitment to fairness, I am confident we can advance the department's standing, deliver meaningful solutions to societal challenges, and deepen our contributions to the broader academic mission.

Finally, I extend my heartfelt gratitude to the search committee and Dr. Andrew Short for inviting me to apply for this position. The Department of Agricultural and Biological Engineering at the University of Florida has made remarkable strides, and I am genuinely excited by the prospect of joining such a committed and forward-thinking community. Recognizing that sustained growth relies on the ingenuity and dedication of both faculty and students, I am fully prepared to secure and marshal the resources needed to drive the department's continued momentum. I will be a tireless advocate for the department, college, and university at national and international forums, working closely with stakeholders and agencies to ensure we have the support needed for ambitious teaching, research, and extension missions. Thank you for reviewing my application materials; I look forward to the opportunity to meet with you and explore our mutual interests in the near future.

Sincerely,



A. Pouyan Nejadhashemi, Ph.D.  
Michigan State University Research Foundation Professor  
Director, [Institute of Water Research](#)  
Director, [Center for Intelligent Water Resources Engineering](#)  
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