Postdoctoral Scholar Position in Advanced Agent-Based Simulation Applied to Public Health Texas State University Translational Health Research Center (THRC)

Submit application with Attn. to Dr. Eduardo Perez https://jobs.hr.txstate.edu/postings/43389

Position Description:

The **Texas State University Translational Health Research Center (THRC)** invites applications for a postdoctoral scholar position specializing in advanced agent-based simulation applied to public health. The successful candidate will contribute to the development of agent-based models (ABMs) that simulate healthcare systems and evaluate the effectiveness of public health interventions aimed at improving healthcare services and decision-making.

This position provides an exciting opportunity to conduct impactful research, mentor students, and collaborate with interdisciplinary teams. The scholar will engage with healthcare providers, policymakers, and other stakeholders to ensure the models support real-world decision-making.

Responsibilities:

- Lead research projects on agent-based simulations applied to public health.
- Design, implement, and validate ABMs to simulate healthcare systems and predict the long-term impacts of interventions.
- Publish findings in high-impact journals and present research at academic conferences.
- Collaborate with healthcare organizations and public health agencies to enhance model applicability.
- Assist in mentoring undergraduate, master's, and PhD students.
- Contribute to grant writing and research proposals for future funding.

Required Qualifications:

- A Ph.D. in STEM field (Industrial Engineering, Computer Science, or a related field) or Public Health.
- Strong background in agent-based modeling and simulation.
- Proven track record of publishing in peer-reviewed journals.
- Proficiency with simulation tools (e.g., AnyLogic, Python).
- Experience writing grants to NIH and other federal agencies.
- Excellent communication and teamwork skills.

Preferred Qualifications:

- Experience in healthcare analytics or public health systems research.
- Experience working on collaborative research projects involving healthcare systems, policymakers, or public health agencies.

Appointment & Compensation:

- Full-time, 12-month appointment with potential for renewal based on performance and funding.
- Competitive salary and benefits, commensurate with experience.

Application Deadline:

Review of applications will begin immediately, with the goal of having the selected candidate start in Spring 2025.

Contact Information:

For inquiries, please contact Dr. Eduardo Perez at eduardopr@txstate.edu