Postdoctoral Position in AI, Robotics, and Infectious Disease Modeling for Precision Livestock Farming

POSITION DESCRIPTION

Dr. Ramesh Bahadur Bist's **Artificial Intelligence and Robotics (AIR) Lab** in the Department of Biological and Agricultural Engineering at North Carolina State University has openings for **a postdoctoral researcher position**. Highly motivated candidates are encouraged to apply. Prospective postdoctoral researcher will engage in **research on artificial intelligence, robotics, machine learning, infectious disease modeling, on-farm biosecurity, disease intervention and control strategies for improving precision livestock farming.** The anticipated start date is Fall 2025, Spring 2026, or Fall 2026. The initial contract will be 12 months, with the possibility of an extension based on funding availability.

QUALIFICATIONS AND REQUIRED SKILLS

➢ A Ph.D. or met all Ph.D. requirements for a postdoc position in Computational biology, epidemiology, applied mathematics, Statistics, Agricultural Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, or other closely related disciplines.

➢ Experience or interest in at least two of the following areas:
  o Disease predictive mathematical modeling and time-series analysis.
  o Spatial analysis or network analysis.
  o Disease spread modeling.
  o Epidemiology, social networks, mathematical modeling, disease spread modeling, and evolutionary epidemiology.
  o Machine learning modeling.
  o Development of new machine learning models or enhancement of existing models.
  o Build an affordable and user-friendly unmanned ground and aerial vehicles.

➢ Strong programming skills (e.g., C/C++, Python, R-studio, MATLAB).

➢ Knowledge of Livestock, such as poultry, swine, cattle, and other small ruminants.

➢ Excellent research skills and grant writing experience.

➢ Experience in handling large datasets and running robust quantitative analysis.

➢ Demonstrated publication or conference presentation record.

➢ Strong desire for independent field research and group projects.

HOW TO APPLY

If you are interested in any of these positions, please **email your CV and research statement** to Dr. Ramesh Bahadur Bist at baeairlab@gmail.com. *Use the subject line: Prospective Postdoc Application* – **Firstname_Lastname.** Applications will be reviewed immediately and will continue until the positions are filled. Selected applicants will be contacted and interviewed virtually. More information about the application can be found at https://www.engr.ncsu.edu/admissions/.

ABOUT NCSU

NC State University is a public land-grant research university in Raleigh, North Carolina. Together with Duke University in Durham and the University of North Carolina at Chapel Hill, it forms one of the corners of the Research Triangle. It is classified among "***R1: Doctoral Universities***—Very high research activity." In the **2024 U.S. News & World Report rankings**, NC State University ranked **#58 among Best National Universities, #25 among Best Engineering Schools**, and **#3 for Best Biological and Agricultural Engineering** Programs. Additionally, Raleigh was ranked #2 in Best Places to Live in the U.S.