

**University of Maryland**  
**College of Agriculture and Natural Resources**

Position Announcement

**Assistant Professor - AI for Agriculture and Natural Resources (tenure-track) JR 103283**

In Animal and Avian Science, or Environmental Science and Technology, or Veterinary Medicine, or Nutrition and Food Science, or Plant Science and Landscape Architecture

**Apply at [https://uhr.umd.edu/work\\_at\\_umd](https://uhr.umd.edu/work_at_umd)**

As part of the College of Agriculture and Natural Resources Cluster hire, the **Department of Animal and Avian Sciences** at the University of Maryland, College Park seeks candidates with expertise in applying AI and principles of precision agriculture to improve animal systems. Research focus areas may include, but are not limited to: animal behavior, health, and welfare; nutritional and reproductive efficiency; resilience to climatic stress; and reduction of environmental impacts. The candidate's AI-driven research will complement the department's current strengths in reproduction and development, genetics/genomics, nutrient utilization, and infectious disease.

**Appointment type:** 9-month tenure-track faculty

**Salary range:** \$95,000 - \$110,000 The University offers a comprehensive benefits package.

**Anticipated start date:** August 2026

**Position Summary:**

The College of Agriculture and Natural Resources at the University of Maryland seeks candidates with expertise in utilizing AI and machine learning to improve decision making in agriculture, agroecology, and/or natural resources. Applications are invited for one or more tenure-track faculty positions (a cluster hire) at the rank of Assistant Professor with a 60% research and 40% teaching appointment. Faculty will be members of one of these departments based on their disciplinary expertise and research interests: **Animal and Avian Sciences, Environmental Science and Technology, Veterinary Medicine, Nutrition and Food Science, or Plant Science and Landscape Architecture**. Depending on the department's needs, the exact split of the position's research and teaching responsibilities is negotiable at the time of appointment. The successful candidate will join a collaborative, interdisciplinary research community at UMD, with opportunities to collaborate with the AI Interdisciplinary Institute at Maryland (AIM; <https://aim.umd.edu/>), Maryland Agricultural Experiment Station (MAES), and regional stakeholders involved in agricultural and environmental management for rural and urban ecosystems.

Applicants may also be considered for a joint appointment with AIM. Ultimately, we seek individuals interested in applying AI to benefit Maryland residents and farmers in support of UMD's Land Grant mission. Candidates' disciplinary backgrounds could include, but are not limited to, agricultural engineering, agronomy, animal or avian science, aquaculture, computer science, environmental science, food science, horticulture, natural resources management, human

or animal nutrition, plant science, biology, genetics, plant pathology, veterinary medicine, or related fields.

Successful candidates will have experience/expertise applying AI in big data analytics, sensors, computer vision, robotics, remote sensing, precision agriculture, biological systems, molecular biology, precision nutrition, microbiome, wearable technology for health or performance monitoring, gene discovery, or other relevant technologies to solve current community/agriculture/environmental problems.

**Specific areas of research opportunity include:**

- Utilizing AI to accelerate the discovery of strategies leading to improved health outcomes of humans, plants, animals, and the environment,
- Application of AI-enabled surveillance or remote sensing systems, for monitoring and risk assessment in plant, animal, human, or natural ecosystems
- Applying AI to promote human health by increasing the nutritional value of foods and/or increasing food safety,
- AI applications in precision agriculture to reduce production inputs
- Utilizing AI to accelerate gene discovery, programmed gene expression, and *de novo* protein design to develop new strategies/plants/vaccines for enhanced resistance to abiotic stressors and pathogens,
- AI applications to support communication and policy analysis, sustainable design and green infrastructure planning, and ethics and governance across plant, animal, and/or environmental systems

More information about the departments of Animal and Avian Sciences (<https://ansc.umd.edu>), Environmental Science and Technology (<https://enst.umd.edu>), Veterinary Medicine (<https://vetmed.umd.edu/>), Nutrition and Food Science ( <https://nfsc.umd.edu/node/1/>), and Plant Science and Landscape Architecture (<https://psla.umd.edu/>), and existing faculty expertise and teams can be gleaned from their websites.

**Position Responsibilities:**

- Establish and maintain an externally funded research program in one or more research areas listed above.
- Develop and teach new courses in AI and data science applications in animal and plant-based agriculture, environmental science and technology, veterinary medicine, or nutrition and food science at the undergraduate and graduate levels.
- Disseminate research findings through peer-reviewed publications and presentations at national and international conferences.
- Recruit and mentor graduate and undergraduate students.
- Provide academic advising for undergraduate majors and contribute to graduate education.
- Collaborate with faculty across departments, colleges, and external organizations to promote interdisciplinary research and outreach.
- Participate in departmental, college, and university service activities and governance.

**Minimum Qualifications:**

- Ph.D. in Animal Science, Agricultural Science, Environmental Science, Agricultural and Biological Engineering, Nutrition and Food Science, Veterinary Science, Data Science,

Computer Science, Plant Science or Biology, Genetics, Horticulture, Agronomy, Plant Pathology, or related areas.

- Demonstrated experience developing and applying AI, ML, or data analytics to the above-mentioned research areas.
- Strong written and verbal communication skills.
- Evidence of scholarly publications in peer-reviewed journals.
- Potential to develop and sustain a funded, high-impact research program.
- Experience presenting research results at national or international meetings.

**Preferred Qualifications:**

- Experience applying innovative, data-driven approaches integrating AI, geospatial analysis, remote sensing, etc. in animal- and/or plant-based agriculture, environmental science and technology, veterinary medicine, plant science/biology, or nutrition and food science.
- Experience with programming languages (e.g., Python, R), AI/ML tools (e.g., TensorFlow, PyTorch), or GIS and remote sensing platforms.
- Teaching experience at the college or university level.
- Experience working collaboratively in interdisciplinary teams and engaging with agricultural and environmental stakeholders.

**Applications**

Required Application Materials include (1) Cover letter outlining interest in the position that includes a statement of the department that would be a best-fit tenure home; (2) Curriculum Vitae; (3) Brief Research Statement highlighting research accomplishments and ongoing and future research goals; (4) Brief Teaching and Mentoring Statement detailing your teaching interests and experience (both within the home discipline and potential interdisciplinary teaching) and mentoring experience; (5) Published Scholarly Works that demonstrate prior research experience using AI/ML in the discipline; and (6) a list of three Professional References. Requests for letters of reference will be made only for the candidates who are selected for final interviews.

**EEO Statement**

The University of Maryland, College Park is an Equal Opportunity Employer. All qualified applicants will receive equal consideration for employment. Please read the University's [Equal Employment Opportunity Statement of Policy](#).