The Cornell Lab of Ornithology
Senior Technology Officer
Ithaca, New York

Location: Ithaca, New York

The Opportunity

The Cornell Lab of Ornithology seeks a Senior Technology Officer who is forward-thinking and entrepreneurial with significant leadership experience in the tech industry, who is motivated to integrate science, technology, and people to make a difference for conservation and inspiring the public to embrace and protect healthy ecosystems. The Lab will seek a visionary technology leader who is excited about developing a roadmap for technical infrastructure that advances the organization’s strategic objectives. This position is accountable for cybersecurity, IT Infrastructure architecture and operations, web architecture, data infrastructure, and business administration related to technical systems, ensuring that the Lab’s constituent and scientific data are secure and accessible to a global community.

This role requires in-depth, hands-on experience managing complex web applications hosted on premise and in the cloud. Extensive knowledge and experience in data architectures, Data infrastructure, data governance, data management and analytics is required to manage disparate datasets that need to be archived, integrated, and accessible to the public. Business administration experience is required to navigate vendor contracts, manage budgets and relations with the university, and ensure compliance with university policies.

The Senior Technology Officer will directly lead a team of 5+ direct reports (likely to expand) and indirectly lead 5 product program technology leaders that report directly into their respective Product Area Heads. This officer will oversee all technology spending and budgets for The Lab. She/He will oversee and influence product development and project management processes, methodologies, and best practices.

This position will oversee and work collaboratively to:

- Lead the development and implementation of a Lab-wide technology roadmap for the Lab, bringing together the existing technology products and scaling for the future
- Chair the Lab’s technology committee overseeing all technology strategy, resources, budgeting, proposed projects, and technology partnerships.
- Provide leadership and management skills to foster the organization’s advancement, with a focus on guiding technical staff and project teams that will need to collaborate closely and scale quickly in the coming years.
- Create and implement cyber security strategy and the appropriate security frameworks and governance, policies, as well as cyber security best practices for the Cornell Lab of Ornithology.
- Design and lead the implementation of the Cornell lab of Ornithology's strategy for cloud-based web application infrastructure and data technologies.
- Identify and select technologies enabling the Cornell Lab of Ornithology platform to scale globally, while meeting budget targets, decreasing technical debt, and integrating datasets across the organization.
Ensure that the Cornell Lab of Ornithology’s data are secure by working with engineering and operations teams and with Cornell University to ensure implementation of industry best practices for data governance.

Take overall responsibility for technology budget forecasting. Participate in seeking external funding for technical infrastructure by providing technical advice, review, and content for grant proposals and contracts.

The Cornell Lab of Ornithology Overview

Founded more than 100 years ago by pioneering Cornell ornithologist Dr. Arthur A. Allen, the Cornell Lab of Ornithology is a globally recognized leader in science, technology and story-telling, embedded in the heart of one of the world’s great universities. Dedicated to advancing the understanding and protection of the natural world, the Cornell Lab joins with people from all walks of life to make new scientific discoveries, share insights and galvanize conservation action. It brings together world-class science, teaching, and public engagement with the agility and real-world impact of a nonprofit organization to meet our mission of interpreting and conserving the earth’s biological diversity through research, education, and citizen science focused on birds.

The Cornell Lab of Ornithology “The Lab” is a globally recognized leader in technology, data management, and large-scale citizen science supporting birds and biodiversity conservation. The lab curates more than a petabyte of digital assets, one billion bird sightings, and leverage innovative big data analysis tools and machine learning to produce web applications and services to empower a global community of bird and nature enthusiasts, researchers, conservationists, and educators. The Senior Technology Officer will lead The Lab through the next phase of growth as the organization navigates complex technical challenges to provide seamless, data-driven services, learning platforms, and science communications supporting biodiversity and conservation communities in all corners of the globe.

Required Qualifications and Experience

- Bachelor’s degree in Computer Science or related field and engineering experience.
- A minimum of five years’ experience as a Chief Technology Officer or similar role
- Experience with a nonprofit organization or in higher education is highly desirable.
- Management experience is required to lead the development and implementation of technology roadmap for the organization, successfully navigate complex budgets and performance management, and to seek creative solutions for business operations.
- Professional record of accomplishment that reflects significant strategic partnerships and contribution to the business, including demonstrated leadership in large, complex, global projects.
- Proven experience identifying trends in technologies and implementing industry-wide best practices for web application infrastructure, cloud computing, big data management and data security.
- Experience managing vendor relationships, contracts and specifying requirements for purchasing enterprise-level services, hardware, and software.

Core Competencies “Must Haves” Skills and Experiences

- Strong people and empathetic leadership skills with the ability to bring technology teams together and influence collaboration and manage conflict.
- Experience building, presenting, and executing comprehensive strategic technology plans and road maps.
• In depth knowledge and experience in technology areas that include cyber security, data architecture and data technologies, web development, infrastructure operations, and in-depth experience as a technology architect.
• Expertise in data technologies, data storage, data security, data privacy, data governance, and data analytics.
• Strong business and financial acumen.
• Experience in high performance computing and large-scale research technology operations that utilize artificial intelligence, machine learning, advanced statistical modeling, and data analytics.

The Cornell Lab of Ornithology has retained the Diversified Search Group to assist in this confidential search process. Inquiries, nominations, and applications (current resumes and cover letters) should be directed electronically to:

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