

***Faculty Position Available in
Controlled Environment Engineering***

Position: Assistant Professor, Tenure-track.

Location: Cornell University, Ithaca, NY 14853-5701. The academic home for this position is the Department of Biological and Environmental Engineering in the College of Agriculture and Life Sciences.

Position Description and Responsibilities:

The Department of Biological and Environmental Engineering invites applications for a tenure-track position with 50% research and 50% extension responsibilities on a 9-month academic year basis. The candidate is expected to develop nationally recognized research and extension programs on the engineering aspects of controlled environment agriculture (CEA) for food production of horticultural crops and animal protein and will provide engineering leadership to interdisciplinary collaborative teams exploring food production systems and their environmental and economic sustainability particularly as related to the Northeastern USA.

Research: A successful research program will need to address constraints of year-round food production in an adverse climate and incorporate the potential of digital agriculture to ensure positive economic, ecological, and social impacts. We expect applicants to have strong skills in two or more of the following areas: mechanical engineering (heat transfer, HVAC, energy modeling), fluid mechanics, water chemistry, physics (optics, radiation), computer science (control theory, machine learning, WiFi sensor interfacing), systems engineering, and/or plant science. General areas of research could include: space-intensive production systems that maximize food output or economic profitability; hydroponic systems; aquaponic (fish and plant) systems; cropping systems research; greenhouse or high tunnel production; roof or vertical farming technologies.

Extension: The chosen candidate will develop an integrated program of research and extension that will be built around the adaptation step. The candidate's extension program will include industry partners as key collaborators to develop relevant technology and IP for immediate commercial adaptation. The successful candidate will have an immediate home in Cornell's Controlled Environmental Agriculture (CEA) group (see <http://cea.cals.cornell.edu/>) an interdisciplinary group (plant science, engineering, food science, economics) with strong industry collaboration and support.

This is one of five positions generated as part of the digital agriculture initiative in the College of Agriculture and Life Sciences at Cornell.

Qualifications: A Ph.D. in an appropriate discipline is required with demonstrated capability and success in developing research and extension programs at the interface of engineering and biological sciences. A strong background in both engineering and biology is required and an engineering degree is preferred.

Applications and Starting Date: Anticipated starting date is July 2019. Applications including a CV, a statement of research, a statement of extension experience and/or vision, a statement of [diversity, equity, and inclusion](#), copies of relevant publications, three reference letters and transcripts should be submitted online at: <https://academicjobsonline.org/ajo/jobs/11924> Applications will be reviewed **starting November 2018** and will be accepted until this position is filled.