Big Data and Ecoinformatics in Agriculture

Spring 2017, 1cr. Entomology / Agronomy 875
Drs. Claudio Gratton and Chris Kucharik
Mondays 12 – 1:30pm 594 Russell Labs

Structure: Weekly, 90 min class with student-lead discussions based on readings or guest lectures. Grades will be based on participation, leading a class presentation, and writing a short summary of a session topic. Syllabus forthcoming in early January here.

Description: The era of “Big Data” is here and it is rapidly transforming many fields of research, not the least of which is the study of agriculture and the environment. This seminar is for graduate students and post-docs interested in learning more about this rapidly expanding field and the diversity of approaches that are being taken. We welcome students from all backgrounds and disciplines, and anticipate that some discussion topics will not be strictly focused on agriculture (broadly speaking), and will include topics or examples from social media, business, medicine, and environmental/ecology more broadly.

Topics will include: the nature of big data; privacy concerns; novel data sources including remotely sensed data, social media, or citizen science; philosophical considerations in big data including problems and pitfalls; computation and informatics; applications of big data to animal production, crop and pest management, or breeding; decision-making based on big data.

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