

From: Justin Kitzes
Subject: PhD Positions in Spatial Ecology

The Kitzes Lab at the University of Pittsburgh (https://urldefense.proofpoint.com/v2/url?u=http-3A__kitzeslab.org&d=DwIF-g&c=Ngd-ta5yRysqeUsEDgxcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeTyN59ZLoI&m=EOK_uaaOnM4qZbINXt46q1OLBthnYrQhq4MdAQxUKIs&s=LCSVF_7CN8VEBK7yhU8QIvZ00_X0ZKfDuoXG5c2SYs&e=) is seeking up to two

Ph.D. students to join our lab in the Fall of 2018. Our lab studies species diversity and distributions in human-altered landscapes, primarily using methods drawn from spatial macroecology. Our goals are both to answer fundamental questions about how species organize themselves in space and to inform the practice of conservation in fragmented landscapes.

Our lab is currently involved in both theory-based and field-based projects, and incoming Ph.D. students are invited to work on either of these or to develop their own projects along related themes. Our current theoretical work involves investigating the relationship between spatial scaling metrics, such as the species-area relationship, and point process models. We expect these to lead to new predictions of species turnover patterns as well as multivariate scaling metrics that will predict species diversity in patchy landscapes. Our field projects use autonomous acoustic recorders, placed throughout western Pennsylvania, to study the factors that control bird and bat distributions at landscape scales and to provide data to test our theoretical models. A major portion of this research involves developing algorithms and software to identify the species that are present near each recorder from many terabytes of recorded sound files.

We are seeking applicants with interests in spatial ecology, macroecology, conservation biology, avian ecology, statistics, machine learning, ecoinformatics, and/or data science. Competitive applicants will also have prior experience, though not necessarily formal training, in programming (any language), ecological modeling, or other quantitative research methods.

The department provides competitive financial support for graduate students that includes a stipend, full tuition remission, health insurance, and free access to public transportation (https://urldefense.proofpoint.com/v2/url?u=http-3A__www.biology.pitt.edu_graduate_financial-2Dsupport&d=DwIF-g&c=Ngd-ta5yRysqeUsEDgxcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeTyN59ZLoI&m=EOK_uaaOnM4qZbINXt46q1OLBthnYrQhq4MdAQxUKIs&s=GFZi8HkOqra6ruiPqeU5grVBhZqLY10PGy2QIIKcGXU&e=). Students

admitted to the graduate program have typically been offered 5 years of guaranteed support, with at least one year free of teaching responsibilities. Depending on students' interests and skills, up to an additional two years of research support may be available from our lab.

Applications are due by January 3rd, but interested applicants should contact Dr. Kitzes during the fall term. Please send an email (justin.kitzes@pitt.edu) that includes a few paragraphs describing the type of work that you are hoping to do for your dissertation and why you are interested in our lab in particular, as well as your CV.

Please see our lab website (https://urldefense.proofpoint.com/v2/url?u=http-3A__kitzeslab.org&d=DwIF-g&c=Ngd-ta5yRysqeUsEDgxcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeTyN59ZLoI&m=EOK_uaaOnM4qZbINXt46q1OLBthnYrQhq4MdAQxUKIs&s=LCSVF_7CN8VEBK7yhU8QIvZ00_X0ZKfDuoXG5c2SYs&e=) and the website of the Department of

Biological Sciences (https://urldefense.proofpoint.com/v2/url?u=http-3A__www.biology.pitt.edu_&d=DwIF-g&c=Ngd-ta5yRysqeUsEDgxcqsYYY1Xs5ogLxWPA_2Wlc4&r=e2OJ1azRFn8ihJzb2HxZT0AqoiqLvxfeeTyN59ZLoI&m=EOK_uaaOnM4qZbINXt46q1OLBthnYrQhq4MdAQxUKIs&s=jk5wsgU2IPaz-cg9gverhuceV6mYyubZTUnxMw_sdE&e=) for more information about the department, other faculty and students, the university, and the city of Pittsburgh.