## APPLICATION OF MACHINE LEARNING FOR AUTOMATED QUANTIFICATION OF BEHAVIOR

THE JACKSON LABORATORY • BAR HARBOR, MAINE



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## about

Over the past few years, behavior quantification and modeling has experienced an explosion of innovation and discovery largely enabled by application of new machine learning methods. These methods have enabled the quantification of behavior at high temporal and spatial resolution, and in concordance with simultaneous measurement and manipulation of neural and genetic function. However, access to this revolutionary technology is limited primarily due to a lack of adequate resources and training. Democratization of this technology through training of the next generation of scientists is necessary to elevate the field of quantitative behavior.

This JAX Short Course will disseminate the theoretical and technical knowledge of this field and train researchers to apply machine learning methods to behavior quantitation and modeling. This course is appropriate for early career researchers and will teach the theoretical basis of machine learning and its applications to quantitative animal behavior analyses, offer hands-on training in experimental workflow, analysis tools and algorithms, showcase key biological applications and foster organic collaborations across disparate fields.

Can't make it to Maine? Attend virtually! JAX strongly encourages diverse learners to participate. Scholarships are available by application.



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