



### ***A computer vision for organismal biology***

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#### **Bio:**

Arthur Porto is an assistant professor at Louisiana State University and leads the BioVision Lab. His research focuses on understanding the evolvability of complex organisms, with a particular emphasis on the role of modularity and developmental constraints in shaping multivariate evolution.

The BioVision Lab is dedicated to developing computer vision tools and infrastructure for biological diversity research. These cutting-edge tools, which utilize machine learning, allow for the extraction of high-dimensional phenotypic data from both fossil and extant lineages, opening up new avenues for studying organismal and evolutionary biology.

The lab's research is collections-based and encompasses diverse research organisms, including marine invertebrates (bryozoans) and mammals. The lab seeks to answer questions about the evolution of the genetic architecture of complex traits, the paradox of stasis, and the reshaping of genetic variation.