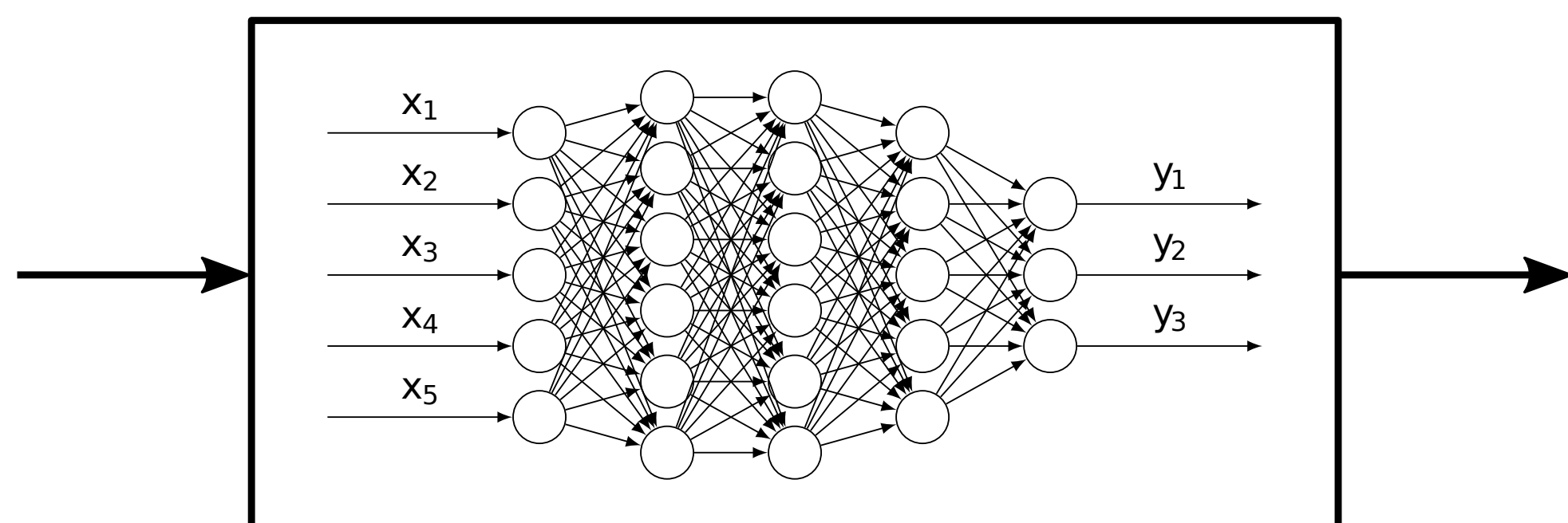
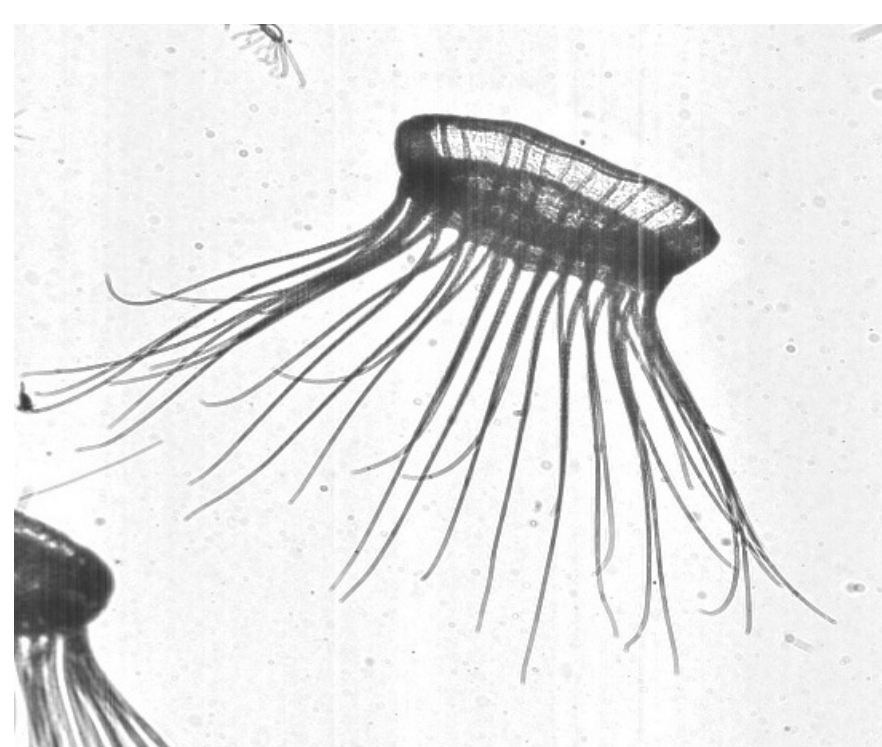
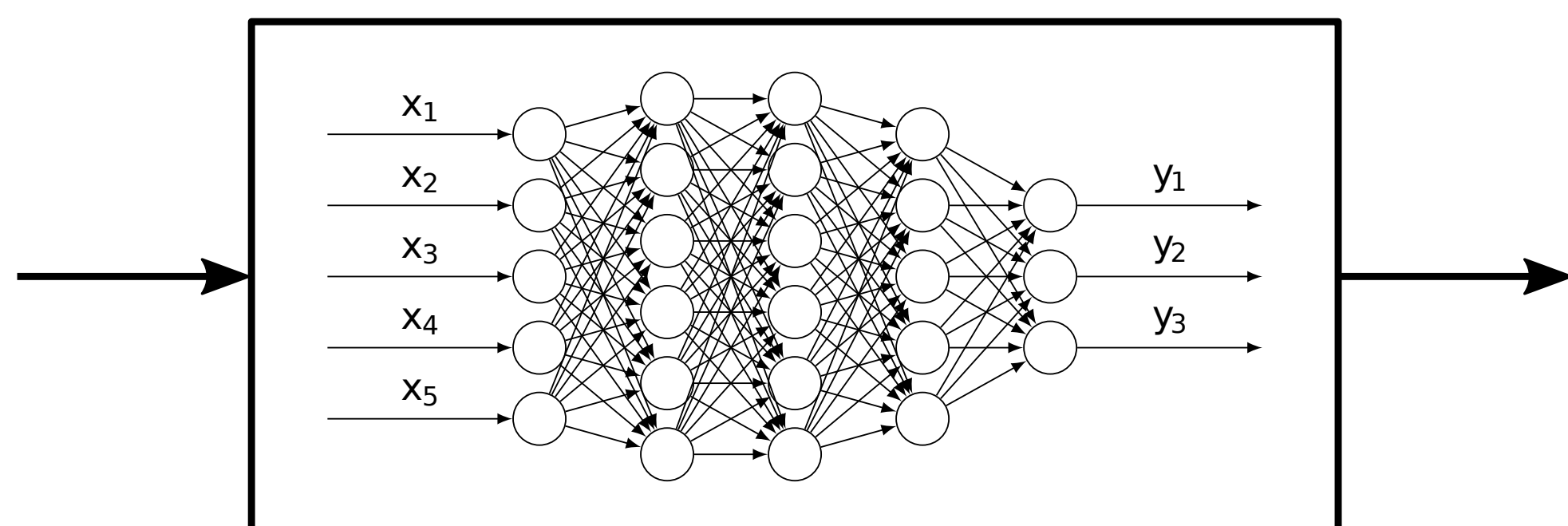
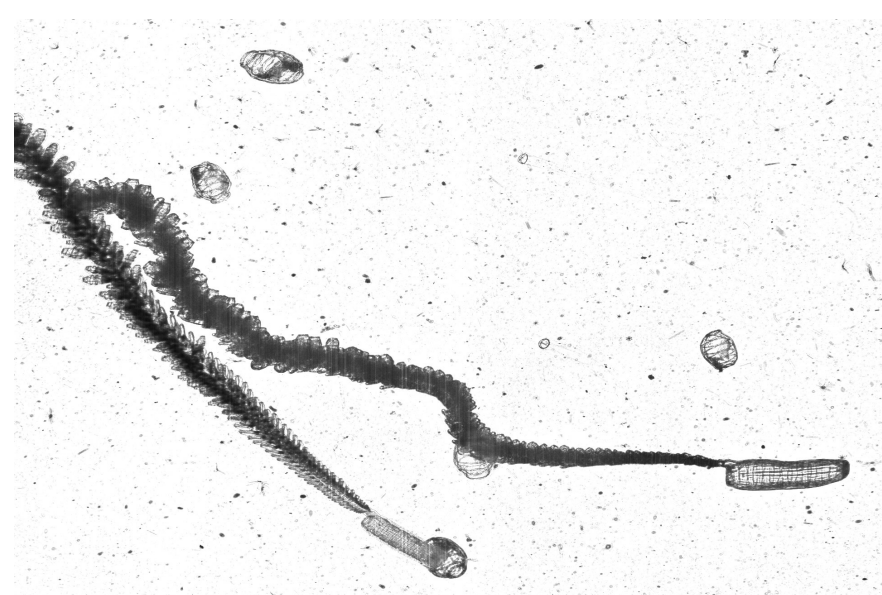


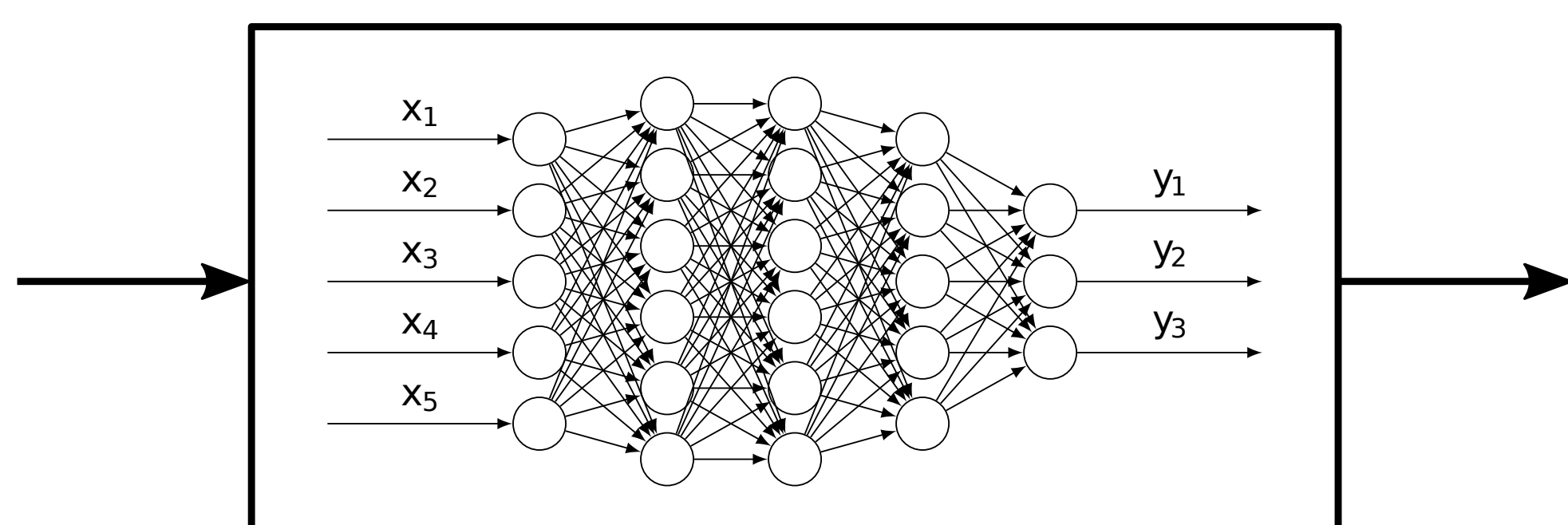
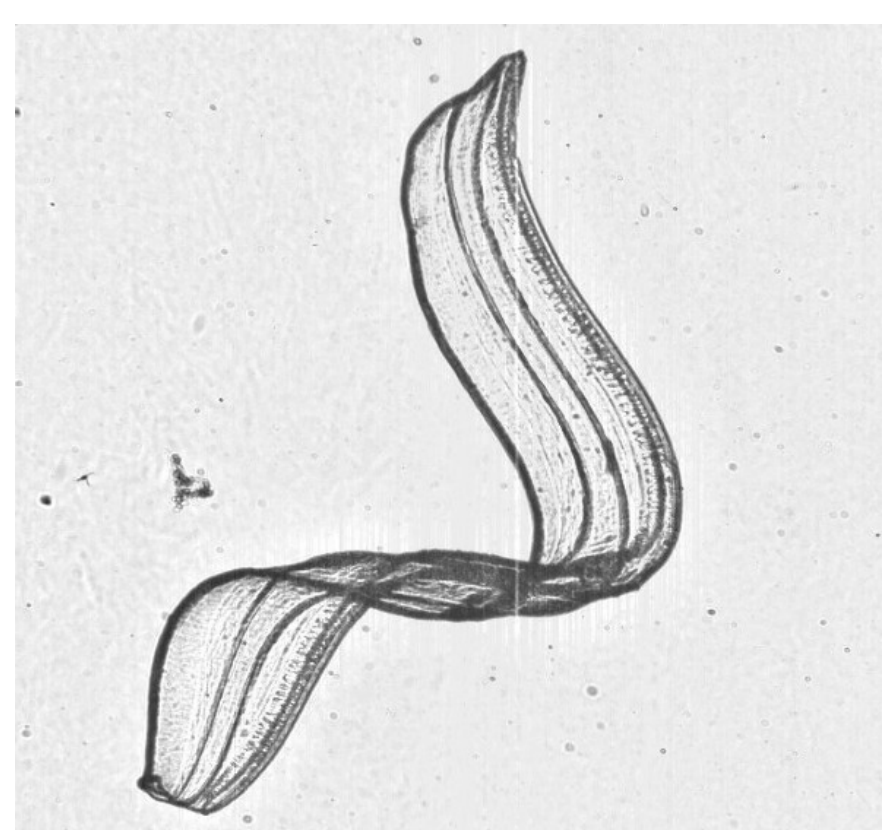
WHO'S THAT PLANKTON?



**Hydromedusae Solmaris
with 83% Confidence**



**Tunicate Doliolid Nurse
with 76% Confidence**



**Ctenophore Cestid
with 91% Confidence**

CHRIS CURRO EE '15 AND HARRISON ZHAO EE '16, ADVISOR: SAM KEENE

We created a system for the automatic classification of different species of plankton. We utilize convolutional neural networks and the Torch 7 framework to create powerful statistical models that determine plankton species directly from images like the ones above. We created the system to compete in the National Data Science Bowl, where we placed 29th (97th percentile) in the world and were one of the top student teams.

Source Code: github.com/harrisonzhao/plankton

More Info: ee.cooper.edu/~curro/plankton.pdf