

G

Computer Vision Software Developer for Tracking Animal Behavior

Does a Master's / job in machine learning and computer vision, analyzing the complex social behavior of fish, sound interesting to you? If you are also passionate about developing software tools for detection and tracking, then join the Baier lab!

We are offering an amazing opportunity to apply your software development and machine learning skills in a challenging and diverse project. This role is at the heart of a very international and multicultural research group of PhDs and postdocs at the Max Planck of Neurobiology in Martinsreid. The position is available as early as **November 1**st **2021**.

For more information about the group and project see: https://www.neuro.mpg.de/3712914/cichlids

Main responsibilities:

• Design, maintain and upgrade of parallel multi-process, data intensive, CPU/GPU based computer vision and data analysis pipelines.

What should you bring?

- Experience with Python
- Knowledge in deep learning CNN and RCNN architectures.
- Knowledge in computer vision algorithms for video/Image preprocessing.
- Understanding and interest in machine learning
- Some interest in the biology of fish and their behaviors
- optional: knowledge about Linux systems

We already have several synchronized cameras in place, generating videos from various angles. The challenge for tracking lies in the differences in sizes of the fish and the sandy background. Our tools are in good shape, but it would be your job to further optimize and adapt to new scenarios. In addition, you would work on analyzing the data with us.

Feel free to get in touch with us and write an email to Ash Parker: ashparker@neuro.mpg.de