

Thank you for your special lecture, Prof. Dimitrios Politikos!

Thanks for Dr. Dimitrios to introducing deep learning convolutional neural network (CNN) and its application in the identification of nekton. It shows promising future in lots of area and saving tedious repetition works in scientific researches.

Sheng YE

Thank you for the nice lecture. I could study AI for expecting age of fish.

Kotaro Yoda

Thank you for your great talk. It is great for me to know about a new way that using AI technology in fish-study.

YU ZESHU

Thank you for very interesting presentation. I hope that the technology will improve to detect daily resolution of otolith.

Aono Tomoya

I enjoyed your presentation because I'm interested in machine-learning. Also, in our lab, we research about fish aging in many ways, but no one don't use approach of machine-learning, so It's very interesting to me.

Ito Takumi

Today's talk was very interesting. I would like to hear more about analysis using Machine Learning as well as Deep Learning (if you have such a topic).

Kazuo ishikawa

The lecture was highly interesting and he discussed lot of advanced techniques and methods in the relevant field. I highly appreciate his effort to disseminate the knowledge! Thank you very much!

GGN Thushari

Very interesting lecture and many new concepts to analyze ocean data. Integration of many fields to analyze big data is interesting. However, accuracy of addressing to a real biological problem is still debating. I hope we need to discuss this in large scale. Thank you.

Duminda Senevirathna

Thank you for your interesting presentation. I hope that the Deep Learning system will be a powerful tool for the identification of Rhizalian plankton species in the future.

Ryo Ichinohe

Thank you for your interesting presentation and answering my question during the seminar. It is also necessary to reduce the temporal and financial cost for otolith daily age analyses of fish larvae and juveniles, which are important to know the process of the recruitment. The technique you introduced will enable to analyze not only annual but also daily analyses from otolith more efficiently.

Megumi ENOMOTO

I became interested in the technology of automatic age assessment from otolith images, thank you.

Hikaru Jitoshu

Thank you for the valuable lecture today! I was able to learn a lot about many examples of applying AI technology to research. I was especially interested in the technology to determine the species of fish from images of eggs and larvae. Then, I have a question, (and maybe I just missed it) but I thought that we won't know if the fish species determination is actually correct until people are able to determine it. How would you consider the reliability of the AI's judgment? I would like to look into it again myself. It was really interesting to learn about so many new technologies. Thank you very much !!

Mana Mura

Dear Dr Dimitrios, thank you for your detailed explanation about the machine learning for fisheries science. It has motivated us young researchers to explore the possible new tools for our target organisms.

Lum Wai Mun

Thank you for a great lecture. Although the lecture is out of my field (microbial ecology), the content is very interesting and inspiring. I knew DL and its robustness in other fields but didn't know the application to the aquatic field. This lecture does not only expand my knowledge but also motivates me to apply this powerful tool to my research. Thank you very much again and wish your safe.

Sato Takuya

Thank you for your interesting lecture, it really opened my eyes to combine the AI with fisheries biology! It would be more technology can be applied into massive data collective process, so that more accurate management measures can be made for ocean and fishery! Hope I can also make use of these AI methods into my future research! Thank you for the inspirations! Good luck and all the best!

Yumeng Pang

Thank you for your interesting presentation. I thought your research was very significant in the study of fish ecology and ecosystem model.

So, I have three questions about your presentation.

1) Which part of the process did you have the most difficulty with, when automating fish age prediction?
2) I believe that some otoliths are so irregular in shape that they cannot be assessed for age.

How many of these otoliths are there in relation to the total number of samples?

Also, if the percentage of such otoliths is large, I think it is highly likely that only biased results will be obtained even if deep learning is used for age assessment. In other words, I think it may not be possible to determine the growth and age of the population. What are you thinking about this?

3) How do you think this otolith analysis can be applied to your own ecosystem modeling research?

I think that by using otoliths to assess age, we can learn about the distribution and growth of samples at different ages. Therefore, I think it will be useful in reproducing the ecology of fishes at different ages in growth-and-migration models.

In my research, I have developed a growth-migration model for a small pelagic fish, the saury, and have used the daily growth rate estimated from otoliths to compare the growth of saury from model. I am very interested in applying otolith analysis to the model and would like to hear your thought about this question.

Thank you again for the nice lecture.

Hitomi Oyaizu