Stanford

# Peter Mastnak

Ph.D. Student in Oceans, admitted Autumn 2024

## Bio

### BIO

Peter is a PhD student in the Oceans department, leveraging his interdisciplinary expertise to develop advanced computational models that predict the movement patterns of large marine predators in response to environmental change. With a Master's degree in Computer Science from KTH Royal Institute of Technology in Stockholm, Peter's research bridges computational science with oceanography, applying advanced mathematical modeling techniques to ecological data while incorporating international policy and economic considerations—a truly interdisciplinary approach to addressing complex marine conservation challenges.

His work focuses on synthesizing diverse environmental variables and large-scale climate phenomena to forecast shifts in marine species distribution, ultimately informing evidence-based policy for ocean protection and sustainable fisheries management. Peter is pioneering innovative technological solutions—from advanced sensor networks to sophisticated predictive software—designed to address global oceanic ecosystem threats. Through this synthesis of computational rigor and conservation science, he strives to transform how we understand, monitor, and protect our ocean ecosystems for future generations.