# **Eliminating Plastic Waste Using Artificial Intelligence(AI)**

AvenueE Roadmap to Your Career in ring & Computer Science

### Plastic Waste is out of Control!

- Plastics are non-biodegradable polymers
- Plastics are ruining our environment
- Artificial Intelligence can help solve this issue using simulation of human intelligence in a machine.

## The Issue

### • What's the big idea?

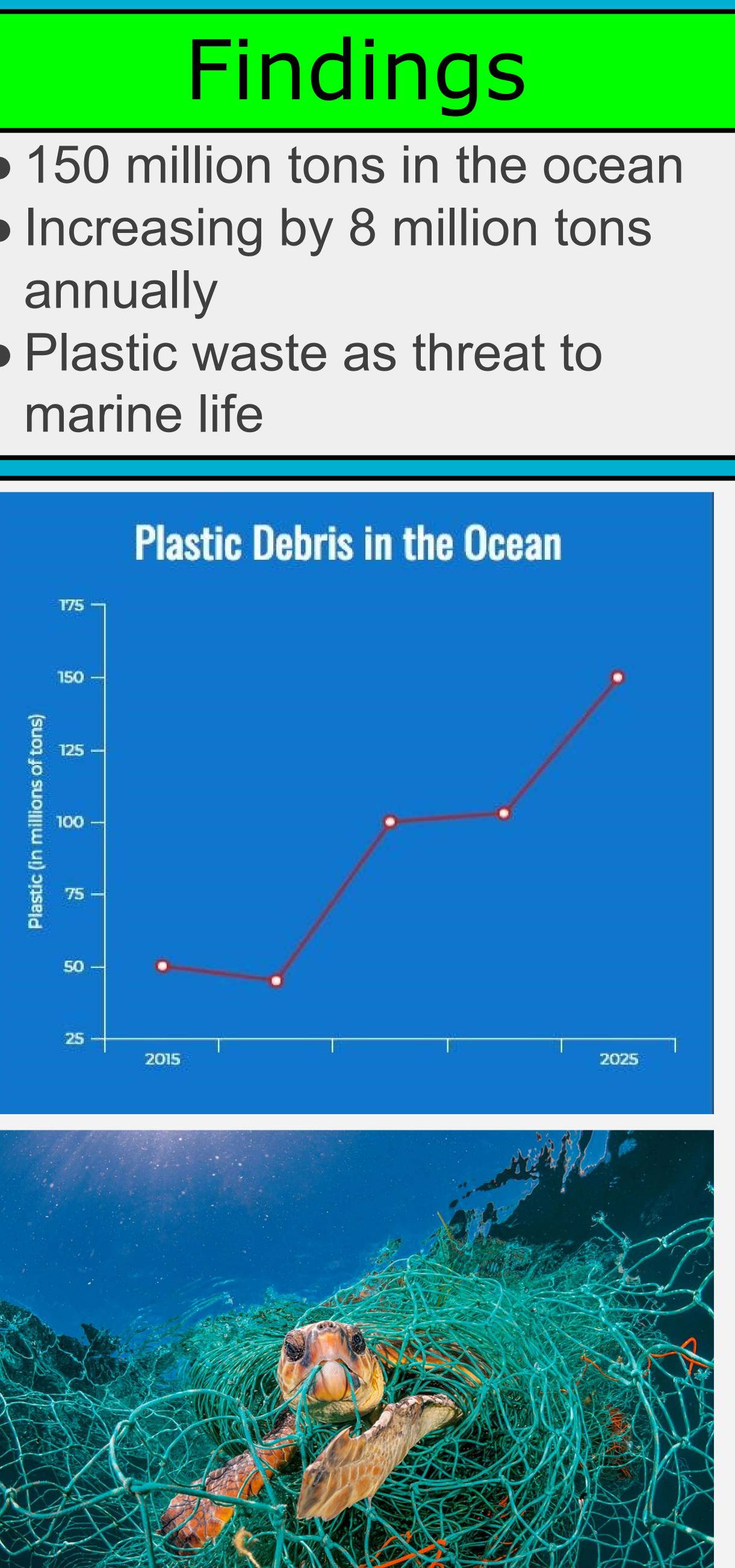
- o Plastic takes about 400 years to decompose
- o Also forms microplastics
- o Serious threat to ocean

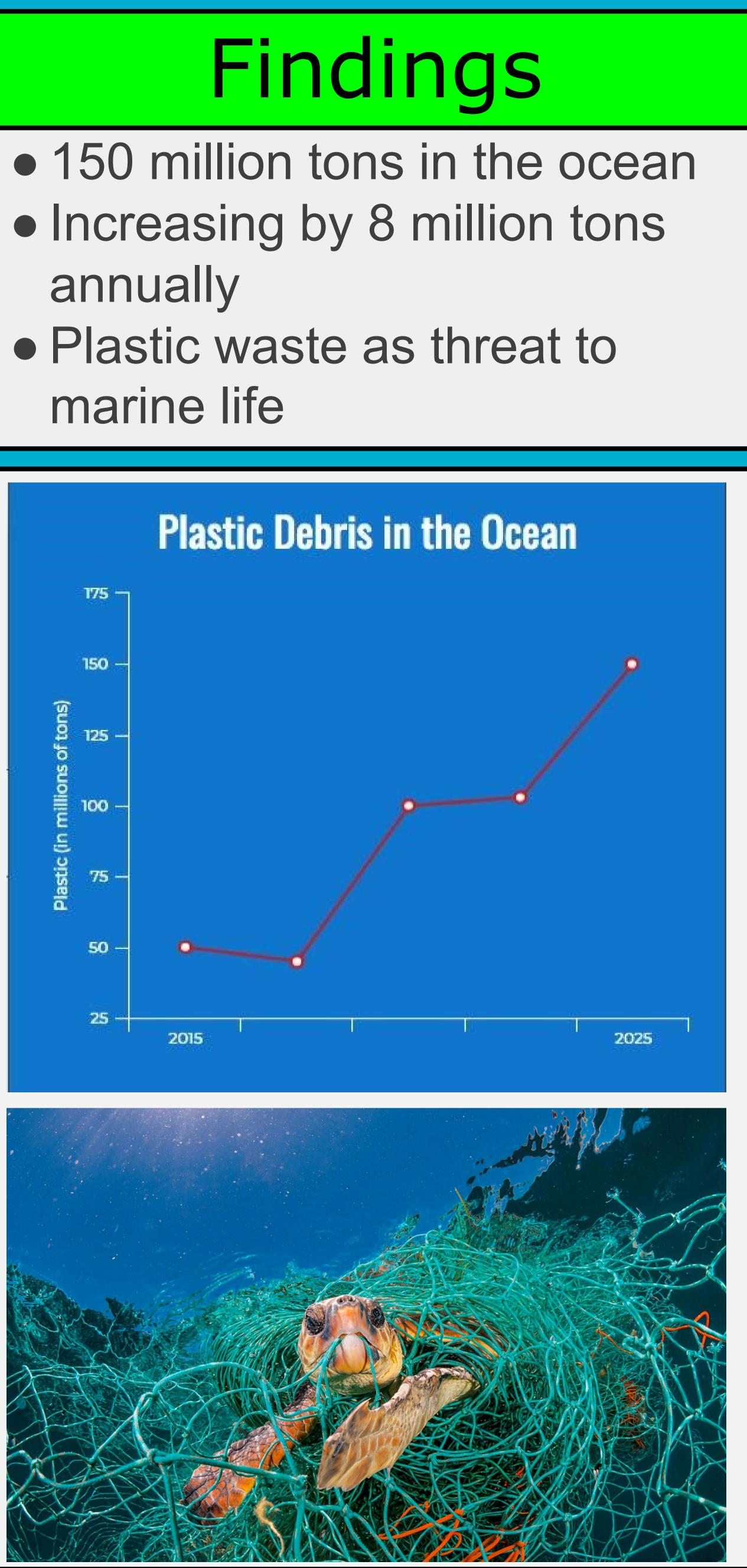
#### How can Al help?

- o Machine learning to detect plastic
- o Using optical satellite to detect plastics

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annually marine life





## Current Progress Refractive Index of plastic helped AI

- detect it.

## What's Next?

arm of drone

## References

Choney, S., 2020. Microsoft Hackathon Leads To AI And Sustainability Collaboration To Rid Plastic From Rivers And The Ocean - Stories. [online] Stories. Available at: <https://news.microsoft.com/features/microsoft-hackathon-leads-to-ai-and-sustainabilitycollaboration-to-rid-plastic-from-rivers-and-the-ocean/> [Accessed 10 September 2020].

Biermann, L., Clewley, D., Martinez-Vicente, V. and Topouzelis, K., 2020. Finding Plastic Patches In *Coastal Waters Using Optical Satellite Data*. [online] nature.com. Available at: <a>https://www.nature.com/articles/s41598-020-62298-z#author-information> [Accessed 10]</a> September 2020].





• Image processing of polluted rivers.

• Tactile Feedback on drones

o Implementation through sensor in

• Metal detectors on drones

o Implementation in arm of drone

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