



Rewilding Planner

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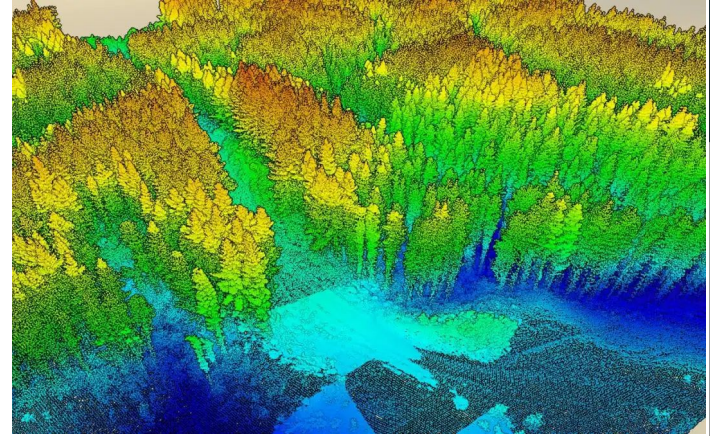
Did you know chopping down trees can help the environment and improve carbon capture

- Chopping down trees in dense forests allows for more sunlight to come
- This allows for more animals to come through and live creating a more biodiverse environment
- Many of these animals bring the seeds of bushes like hemlocks on their backs which help fill the carbon capture gap left by the trees

What we Made

A visual planner that allows you to plot forest land and see which trees you should chop down to create a biodiverse and carbon safe environment

When would this be used?



- Many researchers and agencies use LIDAR map forests and tree density
- Rangers who wish to wild an area could import their data into our project
- Then they could use the data out to map changes to make in their parks

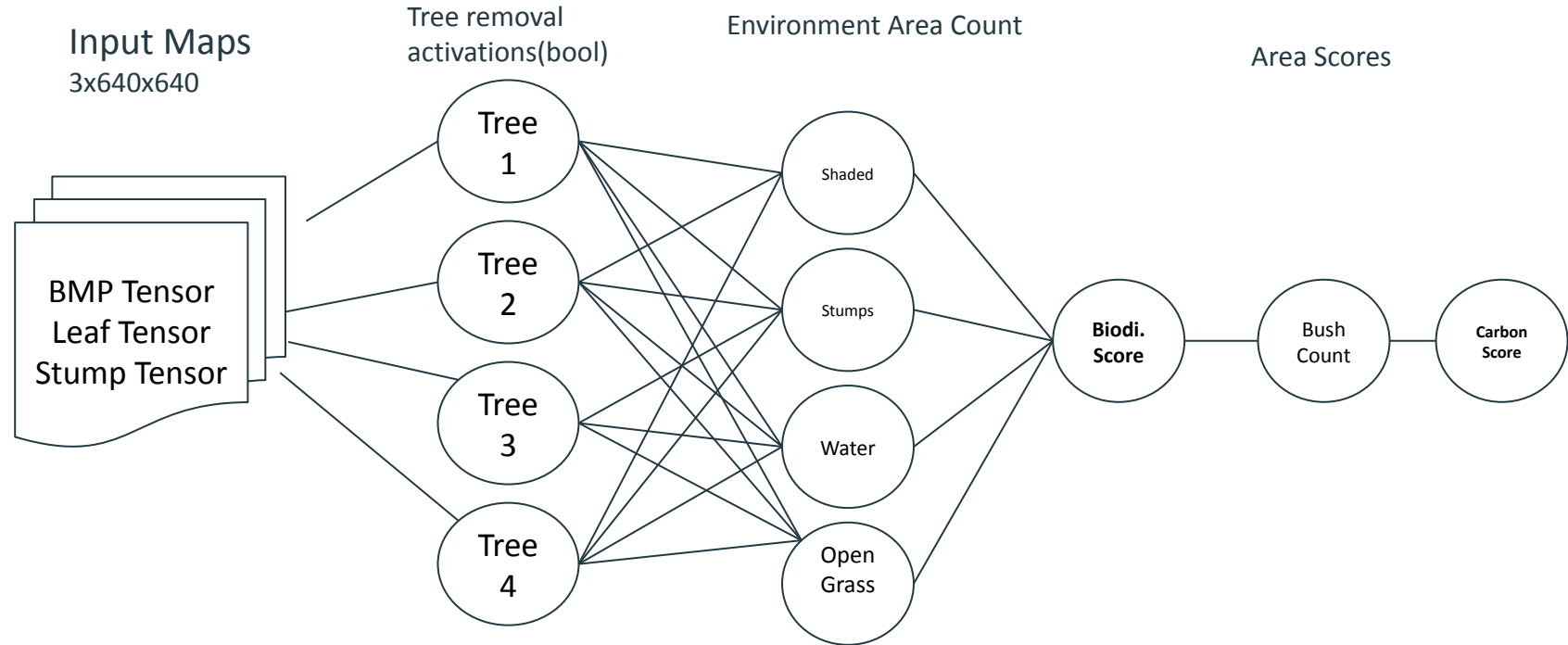
How does it work

- The user creates their plot of land on our website
- Items on the plot are mapped by colors of an image then sent to backend
- Backend scores this map, judges which trees to remove, then returns its adjusted map with a higher carbon capture and biodiversity score

How did we score Biodiversity and Carbon Capture

- **Carbon Capture(kg)** = .5kg per pound of tree and bush
- Tree weight(Spruce) = 1.9kg per 3cm²
- Bush weight(Hemlock) = 1.6kg per 3cm²
- **Biodiversity**= Difference from 4open:1water:1 shaded ratio
- *Bush Count*= (Biodiversity score-.2)*Open Space Available

How does judgement work



Stack

- Svelt Frontend
- Flask Backend(never implemented)
- Pytorch for tensor math

Bibliography

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