

Dr.  
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# Internet\_ of\_Nature

Connecting Nature Impact Summit

# Forever fascinated by nature v. people



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**I'm an Ecological Engineer,  
Technologist, and...**



**Dr.  
Nadiina  
Galle**

**Former PhD & Post-Doc Researcher**



**Fulbright Scholar & Research Affiliate**



**Podcaster, Presenter, TEDx & Keynote Speaker**

**internet\_  
of  
\_nature**

**PODCAST**



# There is a gap between “nature-based cities” and “smart cities”

**Nature-based  
solutions**



Trend 1



Trend 2



**Smart  
cities**

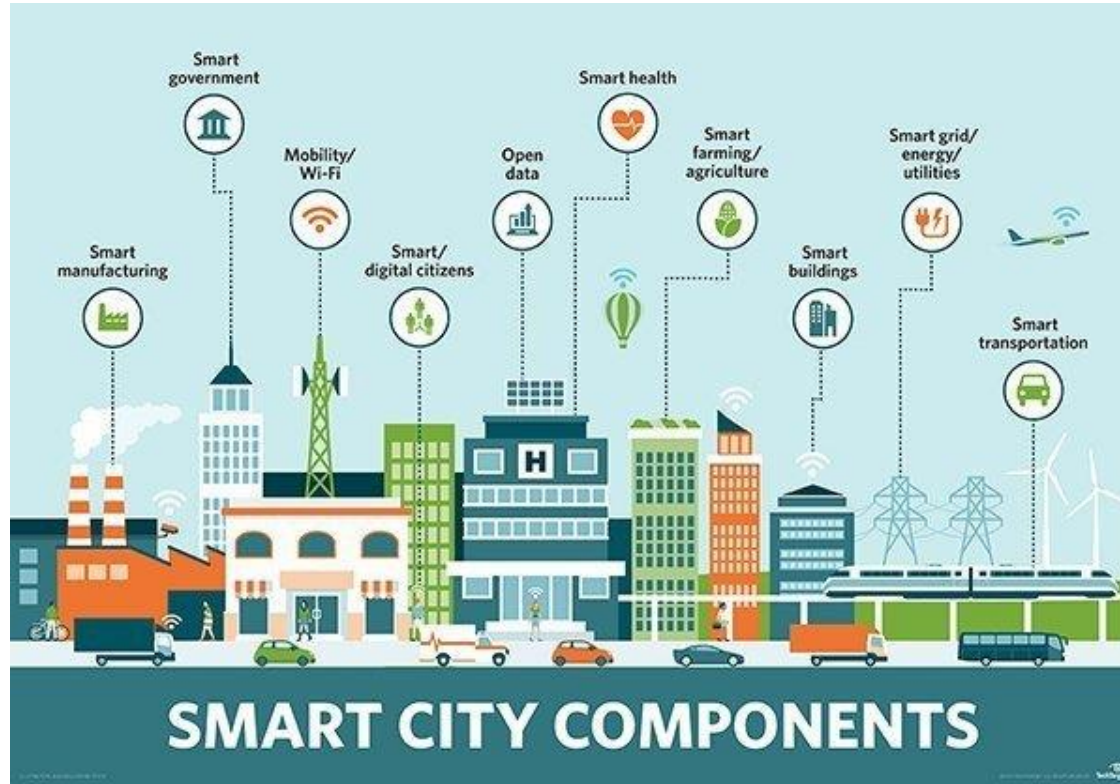
Research  
supported by:





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# What's missing from this picture?



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Photo source: TechTarget | Galle, Nitoslawski & Pilla (2019)

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# So, how do we bridge the gap between “nature-based cities” and “smart cities”?

**Nature-based solutions**



Trend 1



Trend 2



**Smart cities**

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Nitoslawski, Galle, Konijnendijk & Steenberg (2019)









LiDAR

Circular and smart buildings

Hi-res satellite imagery and geoAI

Citizen science-powered flora and fauna ID apps

Social media data mining

Virtual and augmented reality

Wearable technologies

Plants as biosensors

Treebots

Drones

Cloud-based ecosystem intelligence

Mobile augmented reality games

3D mobile mapping

IoT sensor networks

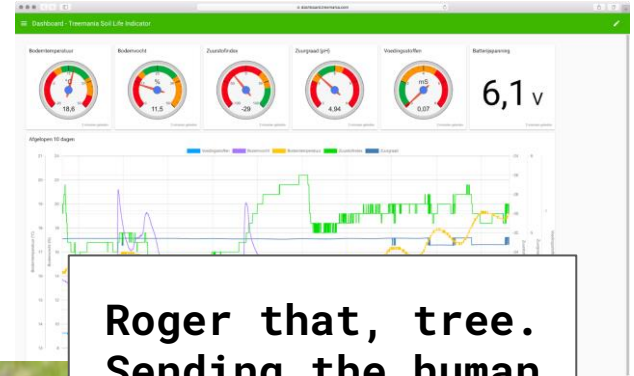
Cryptocurrencies and blockchain

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# Monitor soil health with IoT soil sensors



Hello? Can you hear me? I'm thirsty!



Roger that, tree. Sending the human a message now.



Source: TreeMania

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# On top of the A2 tunnel in Maastricht: The Green Carpet

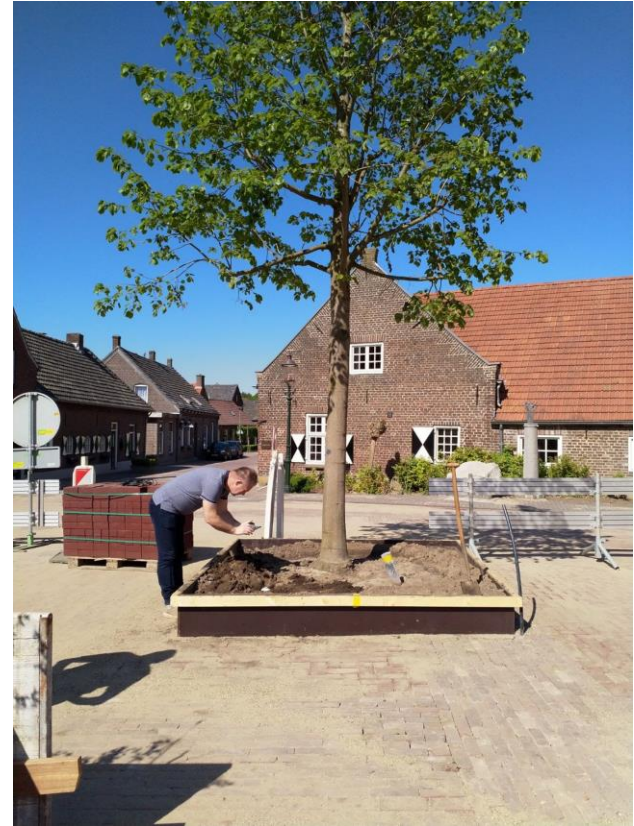
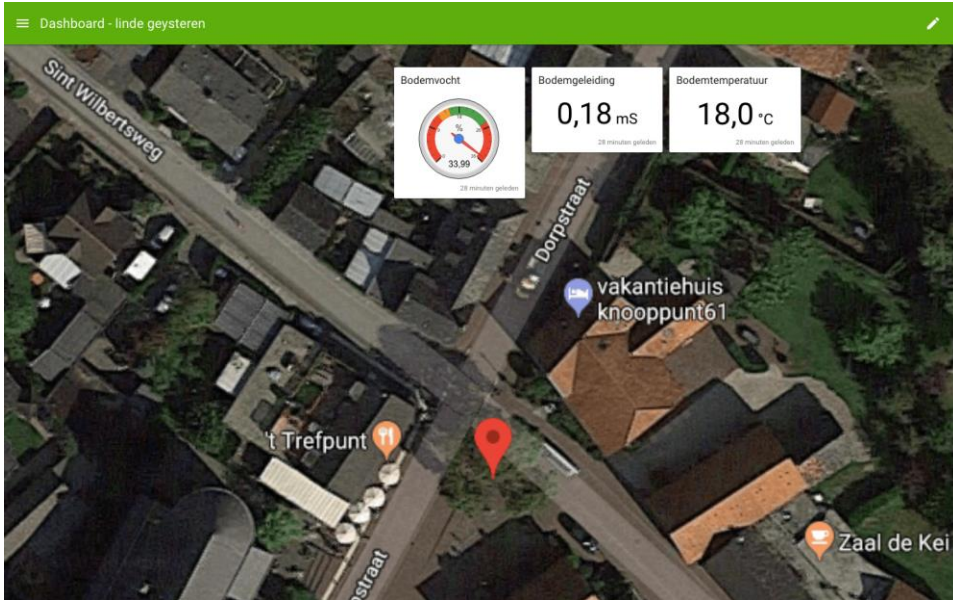


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Soligo



# Everyone can get involved in soil and tree care



Source: TreeMania

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# @awitnesstree, twittering tree shares how she's dealing with climate change



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Bron: @awitnesstree



# “Tweeting Tree Kit, the world’s first scalable kit from sensors to tweets”



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*Bron: Bowie the Birch*



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# “Giants of North” – the talking trees of Amsterdam North



Source: Giants of North



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# Nature is medicine...



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## Rx PRESCRIPTION for Parks

An important wellness initiative from your doctor's office,  
University Hospitals Geauga and Geauga Park District

NAME: \_\_\_\_\_

*Studies show that exposure to Nature contributes to your physical and mental well being.*

- walking
- jogging
- biking
- canoeing
- kayaking
- fishing

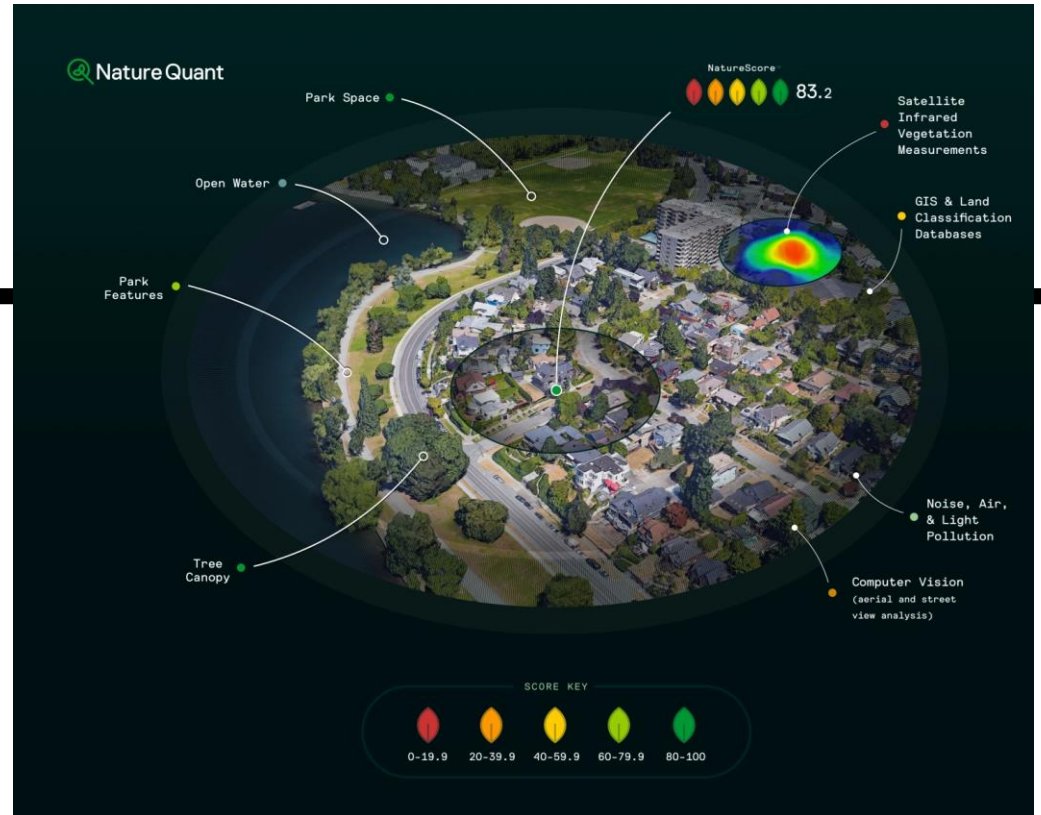
DATE: \_\_\_\_\_

REFILLS: *Unlimited!*

DR: \_\_\_\_\_

 University Hospitals Geauga Medical Center  **GEAUGA PARK DISTRICT**

# ...but how does it score around us?

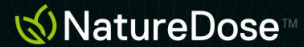
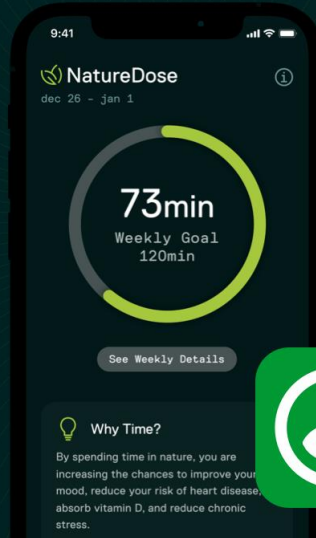




# ...and what is the dose?



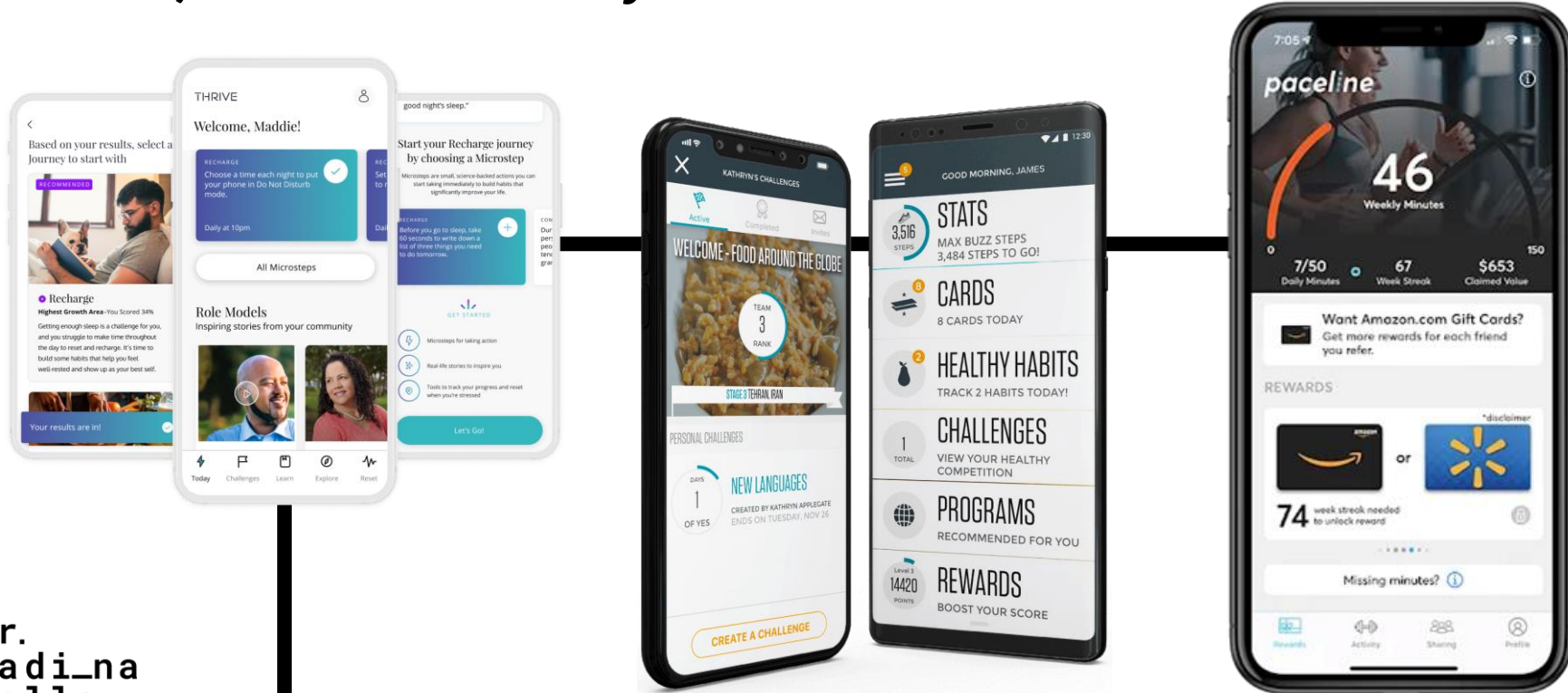
NatureDose™ is a personalized nature prescription tracker that monitors your aggregate time inside, outside, and exposed to nature.



Source: NatureQuant

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# Health insurers & fitness apps already let you earn rewards based on steps, heart rate, and healthy habits...



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Source: Thrive, Virgin Pulse, Paceline

# What if we could earn points and rewards for nature exposure? 🎯



Source: Apple

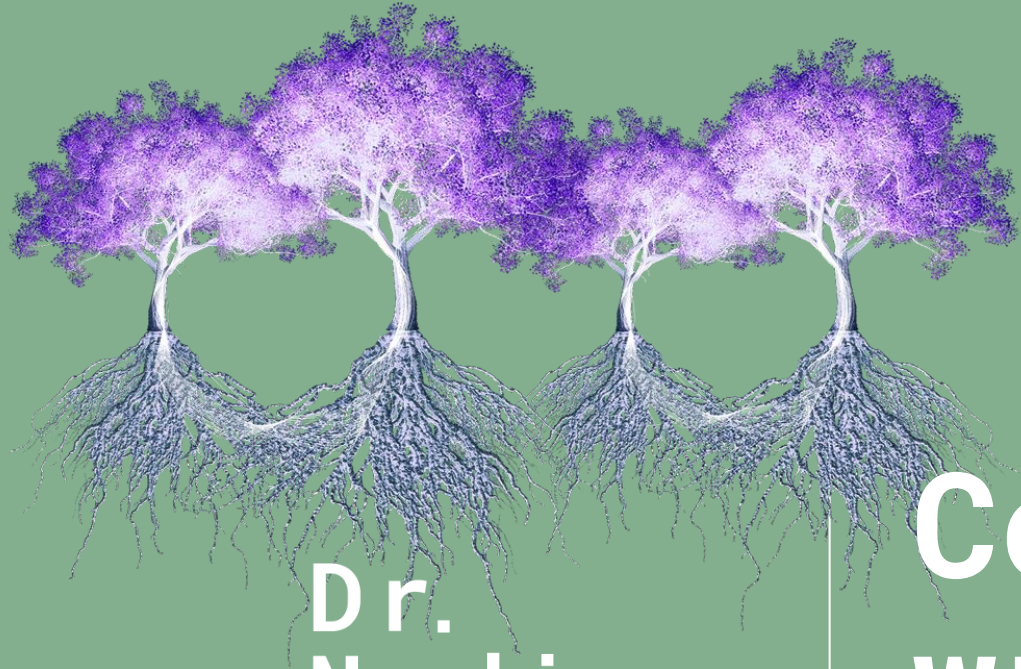
*Is one hour  
in the park  
per day the  
new 10,000  
steps?*

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# Want to learn more? Every Wednesday: a new episode of the Internet of Nature Podcast!





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