

# Case Study

Arturo.ai



## The Modernization of Property Assessment

Assess a property accurately, using satellite imagery

### Expertise

Front-End & Back-End  
Development

### Tech Stack

React, Mapbox GL,  
Deck GL, pg-tileserv

### Deliverables

Front-End & Back-End  
Code

### Interested?

[www.arturo.ai](http://www.arturo.ai)

## The Assessment Problem

Accurately assessing aspects of a property or building is one of the biggest factors of consideration for insurance companies when they decide to insure a property. It involves gathering information about a property via a questionnaire, and sometimes making a trip to view key characteristics of the property in person.

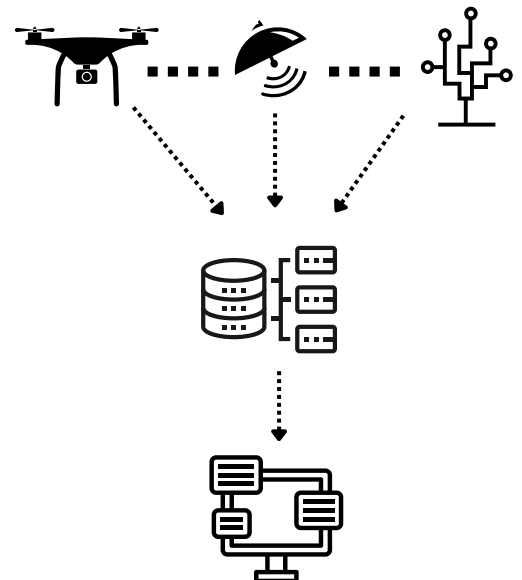
Not only is this process heavily dependent on the homeowner's voluntary information about the property, which is often inaccurate, but doing an onsite assessment is a headache for anyone who's short on time (basically everyone in insurance).

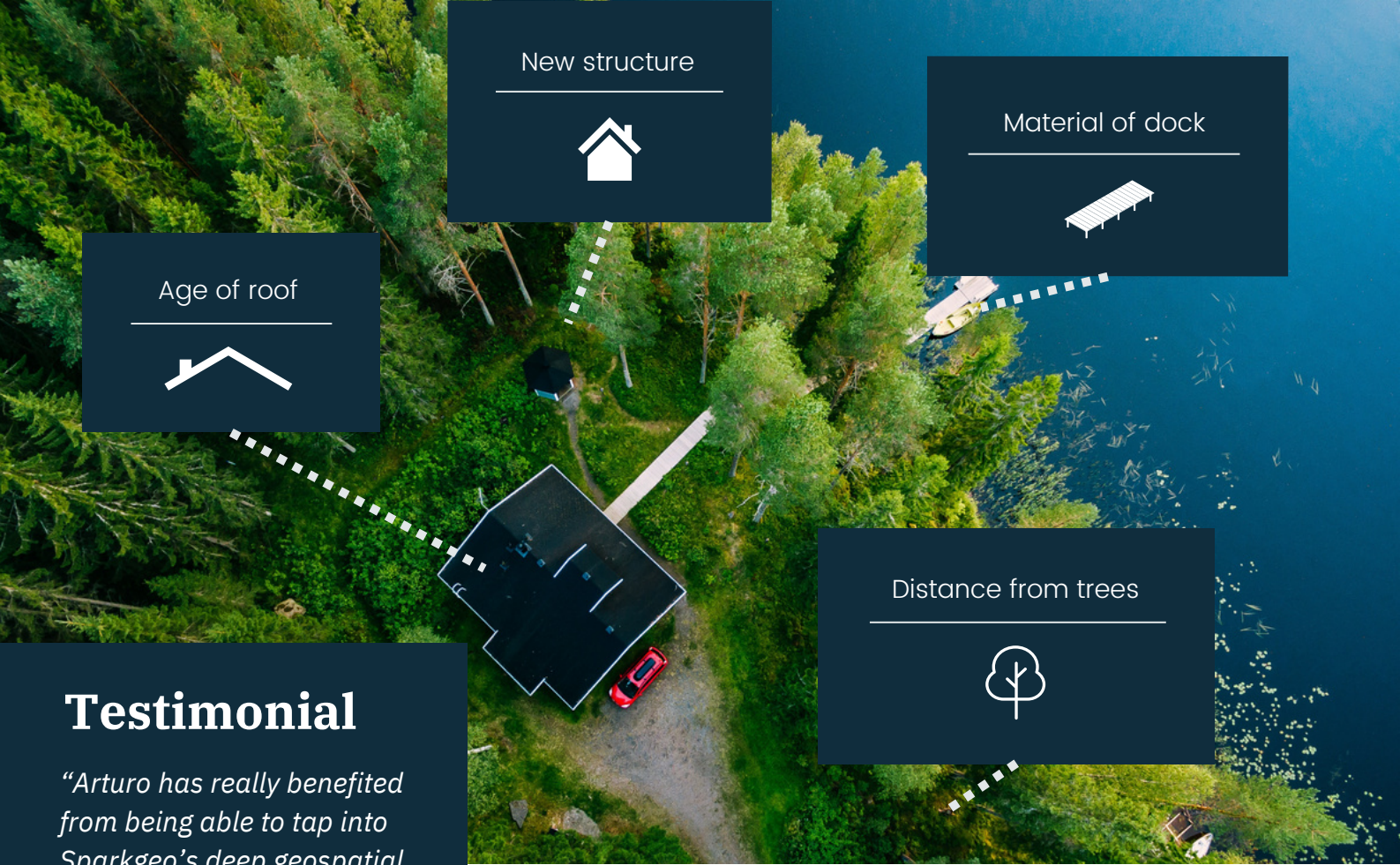
Arturo's solution? Use commercially available satellite imagery, and other data sources to modernize property assessment analysis. Make sure it's fast and reliable and up-to-date.

## Making Sense of Property Features from Space

With our developer team focused on the product's functionality and accuracy, our developers collaborated with Arturo to plan the software's foundation and logic to ensure that all data coming in, and going out through their API had a normalized and accurate understanding of location.

Requirements around our team's technical rigour and discipline set ensured that the software could easily accommodate new location data, coming from satellite imagery, aerial imagery, drone imagery, and ground-level imagery as well.





## Testimonial

*“Arturo has really benefited from being able to tap into Sparkgeo’s deep geospatial expertise while we were ramping up our own internal teams. They have kept us moving as fast as we have needed to be, whilst being receptive to changing priorities.”*

— John-Isaac “JC” Clark,  
CEO, Arturo

## Bringing the Magic to Insurance

New requirements and business logic brought fresh geospatial engineering challenges for us to solve. We needed to find a solution to properly normalizing incoming geospatial datasets and ensuring that data can be queried quickly so that their “on-demand” insurance quoting system can be done in a matter of seconds. To do this, we used a combination of existing open-sourced geospatial libraries and our own code to write an application we knew would accommodate user experience requirements, could scale their API and provide the necessary level of security.



## From Imagery to Property Insights

At the end of this project, Sparkgeo handed off documentation and code for their developers and internal team to run with. Now, not only are on-demand property insights and predictive property analytics as easy as a Google search, it integrates with insurers' proprietary CAT Risk Modelling algorithms.

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