Interdisciplinary Project Big Data Analytics

InstantCITY

Group 1
Fabian Bloch & Christopher Mahn
HafenCity University Hamburg

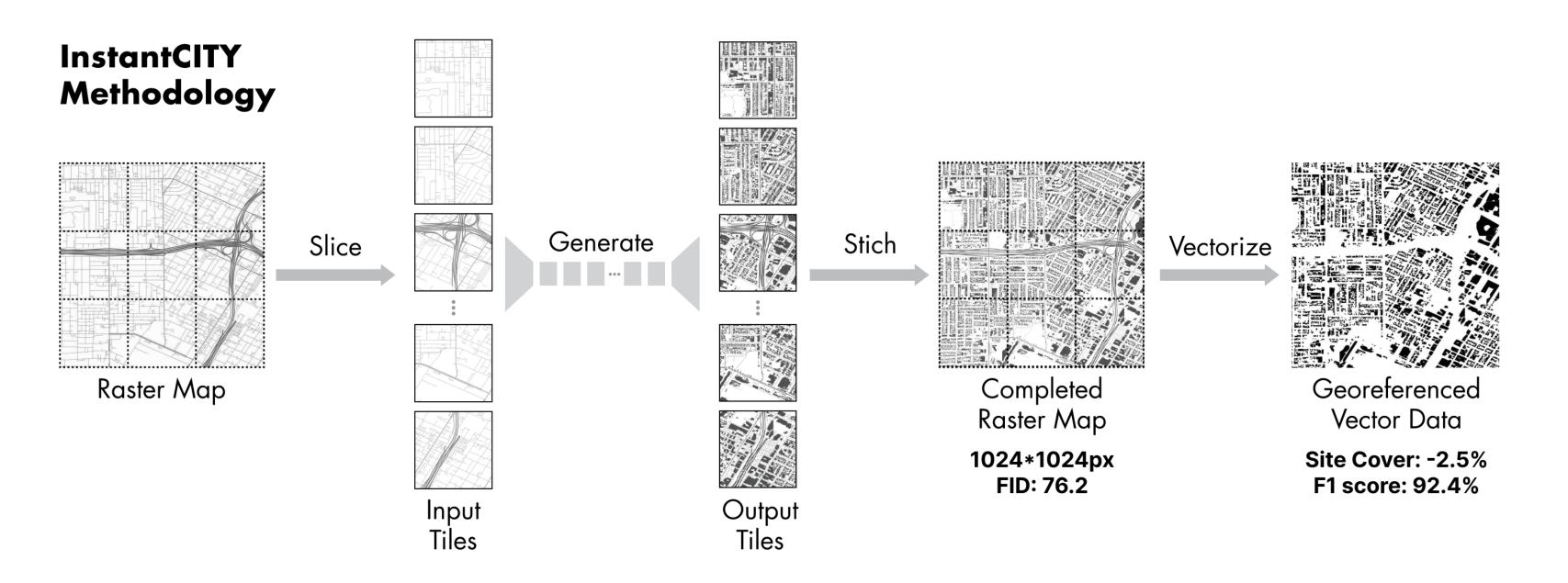


- datasets are collected using a variety of methods
 e.g. surveying, remote sensing, mobile mapping and crowdsourcing
- ▶ building datasets are more abundant than ever
 ⇒ the quality can vary dramatically depending on the region (e.g. OSM data)
- the provided paper intoduces InstantCITY
 a new Geographic Data Translation (GDT) method
- synthesizes buildings for a road layout
- replicates urban city scape design (region specific)

Methodology



https://github.com/ualsg/InstantCITY

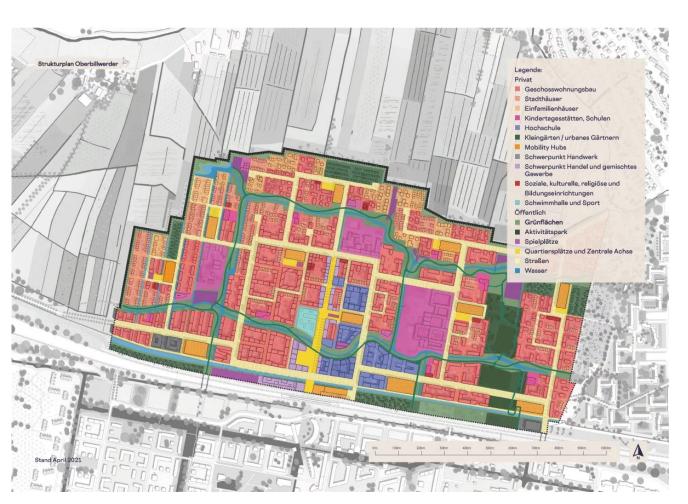




- studying original repository
- exploring the provided examples
- digitize street layout of Oberbillwerder
- train GAN on new city developments in Hamburg
- apply GAN street layout of Oberbillwerder
- visually compare buildings with masterplan



- studying original repository
- exploring the provided examples
- digitize street layout of Oberbillwerder
- train GAN on new city developments in Hamburg
- apply GAN street layout of Oberbillwerder
- visually compare buildings with masterplan



Example Oberbillwerder

https://www.oberbillwerder-hamburg.de/projekt/

masterplan-2022/



- our repository can be find on:
 - https://github.com/c-mahn/InstantCITY
- infos about Oberbillwerder:

```
https://www.hamburg.de/bergedorf/bebauungsplaene/14474896/lo95/https://www.oberbillwerder-hamburg.de/
```

https://www.hamburg.de/oberbillwerder/