

# Interdisciplinary Project Big Data Analytics

---

InstantCITY

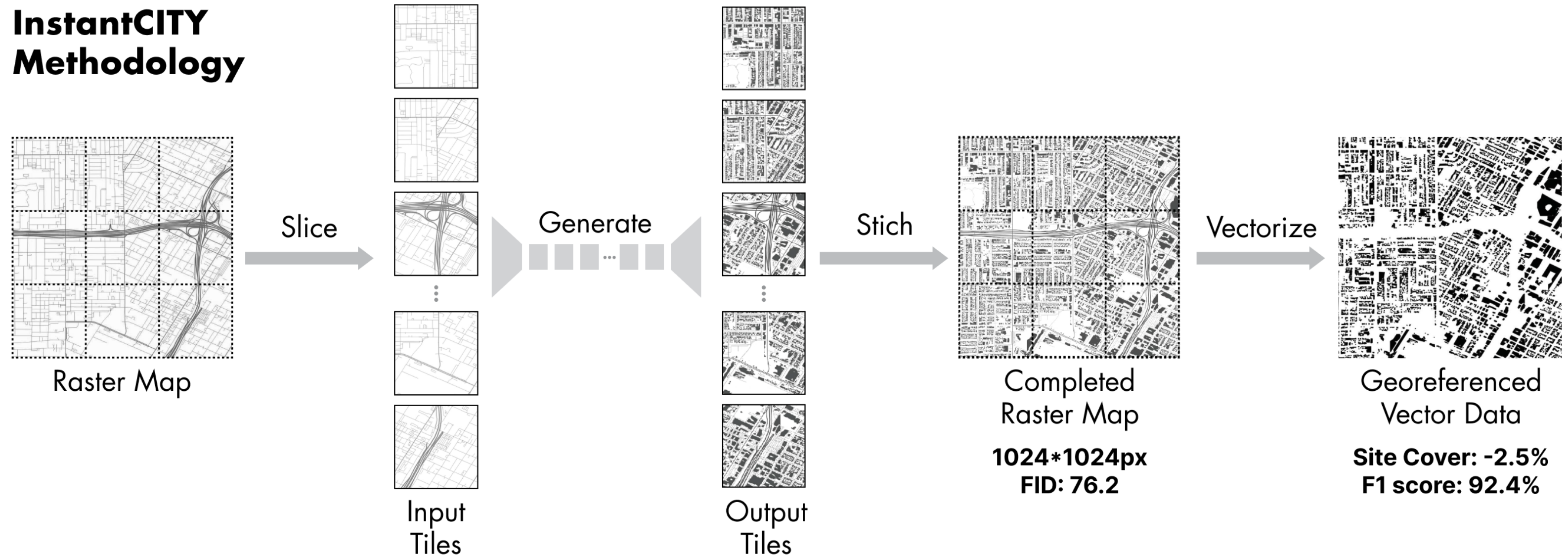
Group 1

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 introduces InstantCITY  
a new Geographic Data Translation (GDT) method
- ▶ synthesizes buildings for a road layout
- ▶ replicates urban city scape design (region specific)

- <https://github.com/uaisg/InstantCITY>

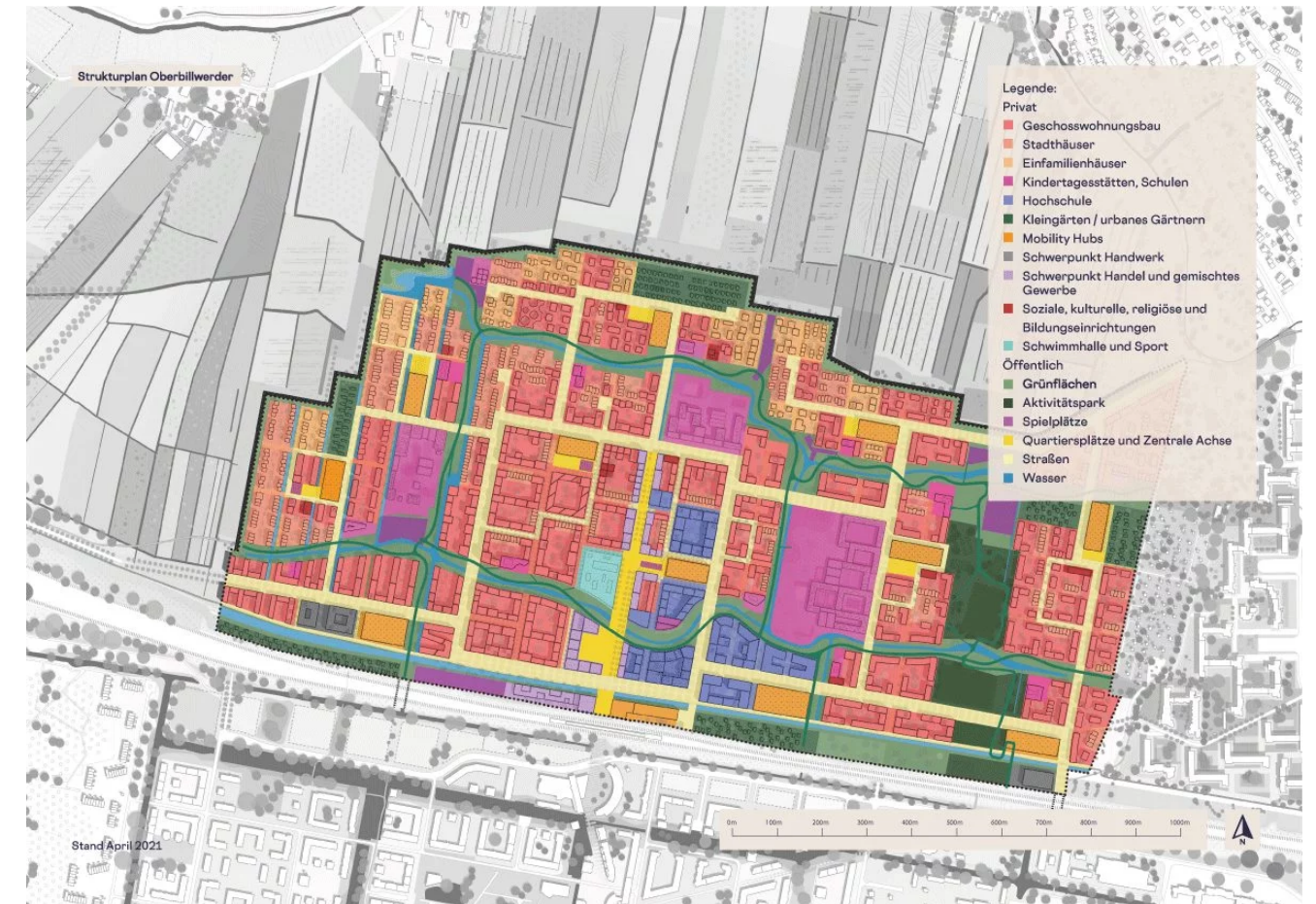
## InstantCITY Methodology



- ▶ 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 reository
- ▶ 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/14474896/1o95/>

<https://www.oberbillwerder-hamburg.de/>

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