

# Workshop

# Generating detailed 3D Streetspace Models in CityGML 3.0 using the free OpenDRIVE data conversion tool r:trån

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### Resulting 3D streetspace model



- r:trån is an
  - open library
  - for road space model transformations (OpenDRIVE to CityGML)
  - steered by parameterizable recipes
- Initial use cases
  - Conversion of OpenDRIVE → CityGML 2.0
  - Conversion of OpenDRIVE → CityGML 3.0

https://github.com/tum-gis/rtron



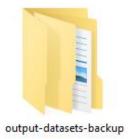
## **Hands-on Tutorial**

- Prerequisite
  - Commands are based on Windows OS
  - Docker installation
  - Data inspector of FME (Safe Software) <a href="https://www.safe.com/fme/trial/">https://www.safe.com/fme/trial/</a>
  - (optional) 3DCity Database (3DCityDB) <a href="https://www.3dcitydb.org/3dcitydb/">https://www.3dcitydb.org/3dcitydb/</a>
- Download of sample data and scripts: <a href="https://syncandshare.lrz.de/getlink/fiCYHWPtetehc1">https://syncandshare.lrz.de/getlink/fiCYHWPtetehc1</a>

TybqWRpeRy/sample-datasets.zip













# **Practical Application: Conversion**

- Run this command (also provided in scripts\readme.txt)
  - Path to the downloaded sample dataset directory
  - Container internal path to project input & output directory
  - Transformation recipe script

```
docker run -i --name rtron --rm^
```

-v C:\adjust\path\to\sample-datasets\input-datasets:/project/input^

-v C:\adjust\path\to\sample-datasets\output-datasets:/project/output^ rtron/rtron - < C:\adjust\path\to\sample-datasets\scripts\opendrive-to-cityqml3.kts</p>