

# Reproducibility readme for Software for User Mobility Simulator for Full-Immersive Multiuser Virtual Reality with Redirected Walking

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## Source code

Available at <https://github.com/imec-idlab/pm4vr>

Python 3

Tested with Python 3.7

Packages: Numpy, Matplotlib, Pandas, Tensorflow

Tested with Numpy 1.19.5, Matplotlib 3.4.2, Pandas 1.3.1 and Tensorflow 2.5.0

The final two packages are only needed for the optional LSTM-prediction.

## Datasets

Random walks are generated on-the-fly while running the simulator

## Hardware

No specific restrictions, should run on any modern home PC

## Running the code

To install the requirements, run `pip install -r requirements.txt`

Then run `python simulator.py` for a fast, small example

or `cd examples && python acm_mmsys_size_vs_users_full.py` for a full example including LSTM prediction.

The latter is expected to take around 30 minutes.