

## Accepted Manuscript

Erlang-based desynchronized urban traffic simulation for  
high-performance computing systems

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PII: S0167-739X(17)31181-0  
DOI: <http://dx.doi.org/10.1016/j.future.2017.06.003>  
Reference: FUTURE 3494

To appear in: *Future Generation Computer Systems*

Received date : 13 December 2016

Revised date : 9 May 2017

Accepted date : 5 June 2017

Please cite this article as: W. Turek, Erlang-based desynchronized urban traffic simulation for high-performance computing systems, *Future Generation Computer Systems* (2017), <http://dx.doi.org/10.1016/j.future.2017.06.003>

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# Erlang-based Desynchronised Urban Traffic Simulation for High-Performance Computing Systems

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submitted to the Future Generation Computer Systems Journal on December 13<sup>th</sup> 2016

## Paper highlights

The paper presents a parallel implementation of an urban traffic simulation method which allows linear scalability of up to 19200 computing cores. The presented work consists of the following contributions:

1. the concept of desynchronised traffic simulation is proposed,
2. its scalable implementation in Erlang technology is presented,
3. the results of experiments involving 19200 computing cores are discussed.

I believe, that the presented analysis of the problem and the proposed solution are valuable steps in the development of simulation methods for HPC systems.

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