



2011

Education

Master's degree programme, Faculty of Informatics Masaryk University, Brno. Field of study: Parallel and Distributed Systems

2008

Bachelor's degree programme, *Faculty of Informatics Masaryk University*, Brno. Field of study: Parallel and Distributed Systems

Parallelization of Methods for Dynamic System Analysis Using CUDA

Bachelor Thesis

The thesis presents a procedure of the parallelization a numerical simulation over a large amount of initial points. Methods for numerical simulations have been implemented so that they can be run on a graphics card while using the CUDA technology through the Java interface.

□ www.is.muni.cz/th/325494



Academic Experience

Systems Biology Laboratory, *Faculty of Informatics Masaryk University*, Brno. Development of a tool for analysis of dynamic systems

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Parasim – Tool for Paralell Simulations and Verification

Research Project

The tool analyzes dynamic systems specified in terms of ordinary differential equations. As a feature distinct from existing tools used for dynamic systems analysis and temporal properties monitoring, the tool is based on a modular architecture. This facilitates optimization and parallelization of individual modules and algorithms employed for analysis, as well as implementation of additional functionality.

 $\ \ \, \square \ \, www.github.com/sybila/parasim$



Teaching Assistant, *Faculty of Informatics Masaryk University*, Brno. Java, Algorithm Design II and Introduction to Functional Programming

 \square Botanická 68a, 602 00 Brno, Czech Republic \square +420 549 491 810 \square info@fi.muni.cz \square www.fi.muni.cz



Working Experience

Quality Assurance Associate, Red Hat Czech, Ltd., Brno.

Development of automated tests for RichFaces project, contributing to Arquillian project

 \Box Purkyňova 99, 612 45 Brno, Czech Republic \Box +420 532 294 111 \Box brno@redhat.com \Box www.cz.redhat.com

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Skills

programming

Java[†], PHP[†], Bash[†], Scala*, Haskell*, R*, Python*, C for CUDA*

technologies

theory

GIT[†], SVN*, MySQL[†], LaT_FX[†], Beamer[†], Linux[†], Maven[†], Arguillian[‡], Selenium[†]

formal verification, algorithm design, parallel computing

^{*}familar with

[†]active usage

[‡]contributor

Online Courses

Computing for Data Analysis

 \square https://www.coursera.org/course/compdata

Functional Programming Principles in Scala

 \square https://www.coursera.org/course/progfun

Web Intelligence and Big Data

 \square https://www.coursera.org/course/bigdata

Algorithms, Part I

 $\begin{tabular}{ll} \hline \square \ https://www.coursera.org/course/algs4partl \\ \hline \end{tabular}$



Projects

Leganto, co-founder and main developer.

Web page for managing read books and finding similar books

☐ leganto.cz

2008

KSI, co-organizer (participant previously).

Correspondence Seminar from Informatics, under the auspices of Faculty of Informatics MU.

☐ ksi.fi.muni.cz

Lužánky, course instructor.

Teaching courses focused on programming in Java and webdesign at leisure time center

☐ www.luzanky.cz

Intersob, co-organizer and developer of evaluation system.

City game focused on high school students, under the auspices of MU.

☐ ganymed.math.muni.cz/intersob

Interlos, co-organizer and developer of evaluation system.

Online programmer contest, under the auspices of Faculty of Informatics MU

☐ interlos.fi.muni.cz

K-SCUK, co-organizer.

One-week long event for participants of correspondence seminars MU.

□ kscuk.zimodej.cz

Languages

Czech Native speaker

English Intermediate

Interests

Games Role playing games, board games, cipher games.

Sport Squash, frisbee.

Books Fantasy, sci-fi.