



<u>2011</u>

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

□ Botanická 68a, 602 00 Brno, Czech Republic □ +420 549 495 990 □ sybila@fi.muni.cz □ sybila.fi.muni.cz

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.

☐ www.github.com/sybila/parasim



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

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

☐ Purkyñova 99, 612 45 Brno, Czech Republic ☐ +420 532 294 111 ☐ brno@redhat.com ☐ www.cz.redhat.com

Skills

programming technologies

theory

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

 $\mathsf{GIT}^\dagger,\,\mathsf{SVN}^*,\,\mathsf{MySQL}^\dagger,\,\,\mathsf{LMT}_{\mathsf{E}}\!\mathsf{X}^\dagger,\,\,\mathsf{Beamer}^\dagger,\,\,\mathsf{Linux}^\dagger,\,\,\mathsf{Maven}^\dagger,\,\,\mathsf{Arquillian}^\ddagger,\,\,\mathsf{Selenium}^\dagger$

formal verification, algorithm design, parallel computing

^{*}familar with

[†]active usage

[‡]contributor

Online Courses

Computing for Data Analysis

☐ https://www.coursera.org/course/compdata

Functional Programming Principles in Scala

☐ https://www.coursera.org/course/progfun

Web Intelligence and Big Data

☐ https://www.coursera.org/course/bigdata

Algorithms, Part I

☐ https://www.coursera.org/course/algs4part1

2008

Projects

Leganto, co-founder and main developer.

Web page for managing read books and finding similar books

☐ legant o.cz

2008

KSI, co-organizer (participant previously).

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

□ ksi.fi.muni.cz

2010

Lužánky, course instructor.

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

□ www.luzanky.cz

2009

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

2009

Interlos, co-organizer and developer of evaluation system.

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

□ interlos.fi.muni.cz

2009

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.