# VANYA YANEVA

Informatics Forum 4.23, 10 Crichton Street, EH8 9AB, Edinburgh, UK vanya.yaneva@ed.ac.uk • +44 (0)755 4845 745 • https://wyaneva.github.io/

### **EDUCATION**

# University of Edinburgh

· PhD, CDT in Pervasive Parallelism

Sept 2015 - Dec 2019 (expected)

 $\label{eq:Research topic: Compiler-Assisted Parallel Testing on Heterogeneous Architectures.$ 

Earned an MSc by Research (with distinction) in August 2016.

Supervised an intern in May-July 2018.

· MSc, High Performance Computing (with distinction)

Sept 2012 - Aug 2013

Master's project: Visual Parallel Programming.

· BSc, Computer Science and Mathematics (2:1)

Sept 2008 - May 2012

Undergraduate Exchange at the University of Chicago

Sept 2010 - June 2011

# **PUBLICATIONS**

Accelerated Finite State Machine Test Execution Using GPUs

Dec 2018

Vanya Yaneva, Arnav Kapoor, Ajitha Rajan and Christophe Dubach

APSEC'18, Nara, Japan

Assessing the Effect of Data Transformations on Test Suite Compilation

Oct 2018

Panagiotis Stratis, Vanya Yaneva, Ajitha Rajan

ESEM'18, Oulu, Finland

Compiler-Assisted Test Acceleration Using GPUs

June 2018

Vanya Yaneva

ICSE'18, ACM Student Research Competition, Gothenburg, Sweden

Compiler-Assisted Test Acceleration on GPUs for Embedded Software

July 2017

Vanya Yaneva, Ajitha Rajan and Christophe Dubach

ISSTA'17, Santa Barbara, CA

ParTeCL: Parallel Testing Using OpenCL

July 2017

Vanya Yaneva, Ajitha Rajan and Christophe Dubach

ISSTA'17, Santa Barbara, CA

# ACADEMIC ACTIVITIES

# Talks & Posters

- · Accelerated Finite State Machine Test Execution Using GPUs (talk) University of Sheffield (2019)
- · Compiler-Assisted Test Acceleration on GPUs for Embedded Software (talk) University of Edinburgh (2018, 2017), Codeplay Software, Edinburgh (2017)
- · Accelerated Test Execution Using GPUs (talk) University of Edinburgh (2016), MathWorks, Cambridge (2016)

# **Teaching**

· Tutor, Software Testing (UG3)

Spring 2016 - 2019

· Teaching Assistant, MSc in High Performance Computing

Autumn/Spring 2015 - 2019

· Demonstrator, Computer Programming Skills and Concepts (UG1)

Autumn 2018

# Conference participation

· PC Member, ECOOP'19 Artifacts

May 2019

· Student Volunteer, APSEC 2018

December 2018

· PC Member, ECOOP/ISSTA'18 Doctoral Symposium

May 2018

## WORK EXPERIENCE

# Codeplay Software Ltd.

May 2017 - Aug 2017

C++ Intern

Edinburgh, UK

- · Worked as a software engineer on the ComputeCpp runtime and SDK, using C++14. ComputeCpp is Codeplay's implementation of SYCL - an open standard for developing cross platform applications on heterogeneous architectures using C++.
- · Developed Python and Jenkins scripts to automate performance benchmarking.

Excelian Ltd.

Oct 2013 - Aug 2015

Technology Consultant

London, UK

- · Worked as a software engineer on an in-house trading application at UniCredit Bank, using C#. The tasks included incorporating large existing codebases and working with legacy code.
- · Performed numerous process management tasks, including administrating releases, tracking features and bugs and managing user accounts.
- · Supervised one junior developer.

Ateeda Ltd.

Aug 2012 - Aug 2013

Edinburgh, UK

Software Developer

- · Successfully ported a GUI intensive application from C# to Java and was responsible for the maintenance and extension of the produced application.
- · Investigated particular sources of error in the CORDIC algorithm and produced a paper presenting my findings and making recommendations for techniques to reduce the impact of the errors.

### AWARDS

The Claire Jones Prize, School of Informatics, University of Edinburgh

Nov 2016

Awarded to the best performing female MSc student.

ICE Award, Excelian Ltd.

June 2014

Excelian's monthly employee award, received for outstanding feedback from UniCredit Bank.

# Student Employee of the Year 2013 Off Campus Category

June 2013

National Association for Student Employment Services

Institutional Level Award - University of Edinburgh

### High Performance Computing Scholarship

May 2012

School of Physics & Astronomy, University of Edinburgh

# TECHNICAL SKILLS

Parallel Programming Other Programming

C, OpenCL, OpenMP, MPI

C++, R, Python, C#

Tools

Linux, Git, Vim, Clang LibTooling, LATEX, Windows, Visual Studio