# VANYA YANEVA

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#### **EDUCATION**

# University of Edinburgh

· PhD, CDT in Pervasive Parallelism

Sept 2015 - Nov 2019 (expected)

 $\label{lem:research} \textbf{Research topic: } \textit{Compiler-Assisted Parallel Testing on Heterogeneous Architectures.}$ 

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

Supervised an intern in May-July 2018.

· MSc, High Performance Computing (with distinction)

Undergraduate Exchange at the University of Chicago

Sept 2012 - Aug 2013

Master's project: Visual Parallel Programming.

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

Sept 2008 - May 2012

Sept 2010 - June 2011

# **PUBLICATIONS**

Accelerated Finite State Machine Test Execution Using GPUs

December 2018

Vanya Yaneva, Arnav Kapoor, Ajitha Rajan and Christophe Dubach

APSEC'18, Nara, Japan

Assessing the Effect of Data Transformations on Test Suite Compilation October 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

- · 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 - 2018

· Teaching Assistant, MSc in High Performance Computing

Autumn/Spring 2015 - 2018

# PC Member

· ECOOP/ISSTA'18 Doctoral Symposium

 $May\ 2018$ 

#### WORK EXPERIENCE

# Codeplay Software Ltd.

C++ Intern

May 2017 - Aug 2017 *Edinburgh*, *UK* 

· Implemented features for the ComputeCpp runtime and SDK, using C++14. ComputeCpp is Codeplay's implementation of SYCL - an open standard for developing 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

- · Implemented features for an in-house trading application at UniCredit Bank, using C#, WPF, MVVM, including incorporating large existing codebases and 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

Software Developer

Edinburgh, UK

- · 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 Edipburgh

Institutional Level Award - University of Edinburgh

May 2012

High Performance Computing Scholarship
School of Physics & Astronomy, University of Edinburgh

#### TECHNICAL SKILLS

Parallel Programming
Object Oriented Programming

C, OpenCL, OpenMP, MPI

C++, C#, WPF, MVVM, Java, Java Swing

Tools Git, Clang LibTooling, LATEX