

# VANYA YANEVA

Informatics Forum 4.23, 10 Crichton Street, EH8 9AB, Edinburgh, UK

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## EDUCATION

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### University of Edinburgh

- **PhD, CDT in Pervasive Parallelism** Sept 2015 - Nov 2019 (expected)  
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

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- 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

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### 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
- Demonstrator, **MSc in High Performance Computing** Autumn/Spring 2015 - 2018

### PC Member

- ECOOP/ISSTA'18 Doctoral Symposium May 2018

## WORK EXPERIENCE

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### 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.

*Technology Consultant*

Oct 2013 - Aug 2015

*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.

*Software Developer*

Aug 2012 - Aug 2013

*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

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**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

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**Parallel Programming**

C, OpenCL, OpenMP, MPI

**Object Oriented Programming**

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

**Tools**

Git, Clang LibTooling, L<sup>A</sup>T<sub>E</sub>X