

# 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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- 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

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### 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** Autumn 2018

## Conference participation

- Student Volunteer, **APSEC'18** December 2018
- PC Member, **ECOOP/ISSTA'18 Doctoral Symposium** May 2018

## WORK EXPERIENCE

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**Codeplay Software Ltd.** May 2017 - Aug 2017  
*C++ Intern* *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

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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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<b>Parallel Programming</b>	C, OpenCL, OpenMP, MPI
<b>Other Programming</b>	C++, R, C#, WPF, MVVM
<b>Tools</b>	Git, Clang LibTooling, $\text{\LaTeX}$