VANYA YANEVA

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

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EDUCATION

PhD, CDT in Pervasive Parallelism   Sept 2015 - Aug 2019 (expected)
University of Edinburgh

· Research topic: *Compiler-Assisted Parallel Testing on Heterogeneous Architectures.*
· Developing methods to accelerate functional software testing by executing test cases in parallel on accelerator architectures. Implementing an automatic code-generation tool to translate tested programs into OpenCL kernels, using Clang LibTooling.
· Earned an **MSc by Research (with distinction)** in August 2016.

MSc, High Performance Computing (with distinction)   Sept 2012 - Aug 2013
University of Edinburgh

· A taught Master's programme, focused on parallel technologies for supercomputing. Provided extensive background on parallel programming for HPC and experience with MPI and OpenMP.
· Master's project: *Visual Parallel Programming.* Developed a graphical framework to allow programmers to visually express parallel aspects of their applications, using Java Swing. The goal was to demonstrate that using visual representations of the parallel applications could help make parallel programming more accessible.

BSc, Computer Science and Mathematics (2:1)   Sept 2008 - May 2012
University of Edinburgh

Undergraduate Exchange at the University of Chicago   Sept 2010 - June 2011

PUBLICATIONS

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*

WORK EXPERIENCE

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.

TECHNICAL SKILLS

Parallel Programming	C, OpenCL, OpenMP, MPI
Object Oriented Programming	C++, C#, WPF, MVVM, Java, Java Swing
Tools	Git, Clang LibTooling, LaTeX

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 on the basis of 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