CHAO PENG

IF-4.23, Informatics Forum, 10 Crichton Street, Edinburgh, EH8 9AB, United Kingdom

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EDUCATION

Doctor of Philosophy in Informatics: LFCS: Foundations of Computer Science, Databases, Software & Systems Modelling   September 2017 - In progress

School of Informatics, the University of Edinburgh, UK   Supervised by Dr. Ajitha Rajan

Research interest includes:
Massively parallel architectures and programming,
Code coverage metrics for GPU programs,
Automated test case generation, reduction and execution,
Smart contract security,
GUI testing.

Master of Science in High Performance of Computing   September 2016 - August 2017

Edinburgh Parallel Computing Centre, the University of Edinburgh, UK

During my Master's program, I was a member of Team EPCC representing the University of Edinburgh for the HPCAC Student Cluster Competition. My contribution as part of the teamwork is featured in my thesis including our computing cluster configuration, computation application performance investigation and optimisation.

Bachelor of Engineering in Computer Science and Technology   September 2012 - June 2016

Xuzhou University of Technology, China

INTERNSHIP EXPERIENCE

Huawei London Research Centre   28/10/2019 - 28/02/2020

Hisilicon Kirin GPU Team   *London, UK*

· Project: Mobile GPU micro benchmarking
· Mentor: Graham Connor, Chief GPU Scientist
· Final Appraisal: Excellent

RESEARCH PUBLICATION

5. Chao Peng, Ajitha Rajan. *Automated Test Generation for OpenCL Kernels using Fuzzing and Constraint Solving.* In proceedings of the 11th Workshop on General Purpose GPUs 2020 (GPGPU @ PPoPP)   Feburary 2020

4. Chao Peng, Sefa Akca, Ajitha Rajan. *SIF: A Framework for Solidity Contract Instrumentation and Analysis.* In proceedings of the the 26th Asia-Pacific Software Engineering Conference (APSEC 2019).   December 2019

3. Sefa Akca, Ajitha Rajan, **Chao Peng**. *SolAnalyser: A Framework for Analysing and Testing Smart Contracts.* In proceedings of the the 26th Asia-Pacific Software Engineering Conference (APSEC 2019).   December 2019

2. Chao Peng. *On the Correctness of GPU Programs.* In proceedings of the 2019 ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2019).   July 2019

1. Chao Peng, Ajitha Rajan. *CLTestCheck: Measuring Test Effectiveness for GPU Kernels.* In proceedings of the 22nd International Conference on Fundamental Approaches to Software Engineering (FASE 2019).   April 2019

SERVICE

Program Committee Member	ISSTA 2020 Artifact Evaluation
Student Volunteer	ETAPS 2019, ISSTA 2019, PLDI 2020
Reviewer	ICSE 2019 SEIP (Software Engineering in Practice) Track

SKILLS

Languages	Mandarin Chinese - Native
	English - Proficient
	German - Basic
Technical Skills	Programming languages: C/C++, Java, Fortran, Python
	Parallel programming: OpenMP, MPI, OpenCL
	Clang/LLVM Compiler Infrastructure
	OpenGL (ES), Vulkan
Tools	LaTeX, Git

TEACHING EXPERIENCE

Software Testing   01/18 - 04/18, 01/19 - 04/19
Teaching Assistant, Tutor and Marker   *School of Informatics, University of Edinburgh*

Computer Programming Skills and Concepts   11/17 - 12/17, 12/18 - 01/19
Marker   *School of Informatics, University of Edinburgh*

Introduction to Java Programming   09/17 - 12/17, 09/18 - 12/18
Demonstrator   *School of Informatics, University of Edinburgh*

SCHOLARSHIPS & HONOURS

SCHOLARSHIPS

- **Huawei Scholarship** (fully-funded PhD scholarship)   04/17
- **Outstanding Graduate Scholarship** at Xuzhou University of Technology   06/16
- **China National Scholarship** of 2014/15 Academic Year   11/15
- **China National Encouragement Scholarship** of 2013/14 Academic Year   11/14
- **China National Scholarship** of 2012/13 Academic Year   11/13

HONOURS & AWARDS

- Nomination for Teaching Awards: Best Student Who Tutors Award   02/18
- Certificate of Achievement for Participating in the 6th Annual HPCAC Student Cluster Competition 06/17
- Distinct Graduate of Xuzhou University of Technology   06/16
- Top Ten Role Models of Study at Xuzhou University of Technology   03/16
- Jiangsu Province-level Excellent Student Cadre   05/15

EXTRA-CURRICULAR & VOLUNTEER EXPERIENCE

- Volunteer and demonstrator at drop-in event What can supercomputers do at Edinburgh International Science Festival   13/04/17-15/04/17
- Key volunteer of the 18th Sports Meeting of Jiangsu Province   09/13-09/14
- President of the Student Union of School of Information & Electrical Engineering, Xuzhou University of Technology   12/14-12/15