

PERSONAL DETAILS

Address Electrical and Computer Engineering
 University of British Columbia
 Vancouver, Canada
Mobile (778) 986-1666
E-Mail flyree@gmail.com

RESEARCH INTERESTS

Distributed Systems, High Performance Computing, Dependable Systems and Fault Tolerance Techniques, GPGPU

EDUCATION

PhD. Candidate, Electrical and Computer Engineering now
University of British Columbia, Canada
Advisors: Professor Karthik Pattabiraman and Professor Matei Ripeanu
Thesis Title: Improving efficiency of fault tolerance techniques

MASc, Electrical and Computer Engineering 2014
University of British Columbia, Canada

Master in Software Systems 2011
University of British Columbia, Canada

BE, Information Security 2006
Wuhan University, China

EXPERIENCE

Research Scholar 2018 June - current
Pacific Northwest National Lab
Mentor: Dr. Sriram Krishnamoorthy

Research Intern 2016 Jan - 2016 Apr
Los Alamos National Lab
Mentor: Dr. Nathan Debardeleben

Mitacs-Accelerate Intern 2011 Nov - 2012 May
Singular Software Inc.
Mentor: Dr. Matei Ripeanu

Software Engineering Intern 2010 Sep - 2010 Dec
Arcatel-Lucent S.A.

Software Engineer 2008 Aug - 2009 Sep
Huawei-Symantec Co. ltd.

AWARDS, HONORS AND COMPETITIONS

J K Zee Memorial Fellowship 2018 May
\$8,800, University of British Columbia

Graduate Support Initiative 2017 Nov
\$12,000, University of British Columbia

Student Travel Grant 2017 Jun
ACM HPDC 2017

Graduate Support Initiative \$5,000, University of British Columbia	2016 Npv
Student Travel Grant IEEE DSN 2016	2016 Jun
Graduate Support Initiative \$6,000, University of British Columbia	2014 Nov
First Place in Coding Competition of UBC Division Microsoft	2014 Oct
Second Place in Outstanding Annual Undergraduate Wuhan University	2005 May

PUBLICATIONS

Journal

1. *A Systematic Methodology for Evaluating the Error Resilience of GPGPU Applications*, **Bo Fang**, Karthik Pattabiraman, Matei Ripeanu, and Sudhanva Gurumurth, To appear in the IEEE Transactions on Parallel and Distributed Systems (TPDS). Accept date: December 2015.

Conference, Workshop and Poster

2. *LetGo: A Lightweight Continuous Framework for HPC Applications upon Failures*, **Bo Fang**, Qiang Guan, Nathan Debardeleben, Karthik Pattabiraman, Matei Ripeanu, The ACM International Symposium on High-Performance Parallel and Distributed Computing (HPDC) June 2017, (acceptance rate 18%).
3. *SDC is in the Eye of the Beholder: A Survey and Preliminary Study*, **Bo Fang**, Panruo Wu, Qiang Guan, Nathan Debardeleben, Laura Monroe, Sean Blanchard, Zhizong Chen, Karthik Pattabiraman, Matei Ripeanu, 3rd IEEE International Workshop on Reliability and Security Data Analysis (co-located with DSN 2016), June 2016.
4. *ePVF: An Enhanced Program Vulnerability Factor Methodology for Cross-Layer Resilience Analysis*, **Bo Fang**, Qining Lu, Karthik Pattabiraman, Matei Ripeanu and Sudhanva Gurumurthi, Proceedings of the IEEE/IFIP International Conference on Dependable Systems and Networks (DSN), 2016, (acceptance rate 21%).
5. *Evaluating the Error Resilience of Parallel Programs*, **Bo Fang**, Karthik Pattabiraman, Matei Ripeanu and Sudhanva Gurumurthi, Workshop on Fault Tolerance for High-Performance at Extreme Scale (FTXS), 2014 (6 pages). In conjunction with DSN 2014.
6. *GPU-Qin: A Methodlogy for Evaluating the Error Resilience of GPGPU Applications*, **Bo Fang**, Karthik Pattabiraman, Matei Ripeanu and Sudhanva Gurumurthi, Proceedings of the IEEE International Symposium on Performance Analysis of Systems and Software (ISPASS), 2014, (acceptance rate 31%),
7. *GPUS: Combining high-performance with high-reliability*, L. Bautista Gomez, F. Cappello, L. Carro, N.DeBardeleben, **B. Fang**, S. Gurumurthi, K. Pattabiraman, P. Rech, M. Sonza Reorda, Embedded tutorial paper (invited), Proceedings of the International Symposium on Design Automation and Test in Europe (DATE), 2014.
8. *Towards Building Error Resilient GPGPU Applications*, **Bo Fang**, Jiesheng Wei, Karthik Pattabiraman, Matei Ripeanu, 3rd IEEE Workshop on Resilient Architecture (WRA) in conjunction with MICRO 2012, Vancouver Canada.
9. *Evaluating Error Resiliency of GPGPU Applications*, **Bo Fang**, Jiesheng Wei, Karthik Pattabiraman, Matei Ripeanu, High Performance Computing, Networking, Storage and Analysis (SC), 2012 poster

ACADEMIC ACTIVITIES

- External reviewers for conferences such as HPDC 18'-14', DSN 17'-15', ISREE 16'
- Student volunteer for PRDC 12' and QRS 15'
- Mentor for Sudeep Sureshan for Mitacs intern program in 2015 summer