Zhongpeng Lin

lin.zhp@gmail.com • linzhp • zplin

Education

University of California **Santa Cruz, CA, USA**
PhD, Computer Science, GPA: 3.89/4.00 *2010 – 2015*

- Thesis topic: Understanding and Simulating Software Evolution
- Research areas: Software evolution, software repository mining
- Courses: *Information Retrieval*, *Machine Learning*, *Artificial Intelligence*, *Analysis of Algorithms*, *Mathematical Statistics*

Institute of Software, Chinese Academy of Sciences (ISCAS) **Beijing, China**
MS, Computer Software and Theory, GPA: 87.9/100 *2007 – 2010*

- Research areas: software cost estimation, software bug prediction
- Courses: *Advanced Data Mining*, *Advanced Software Engineering*
- Honors and awards: *Outstanding Student* of 2009, available to top 15% graduate students

Xiamen University **Xiamen, China**
BS, Software Engineering, GPA: 90.0/100 *2003 – 2007*

- Honors and Awards
  - *Distinguished Graduate* of 2007, available to top 3% graduates by GPA each year
  - *China Construction Bank Scholarship* of 2006 and 2007, available to top 5% by GPA undergraduate students each year
  - *Xiamen University First-Rank Scholarship* of 2004 and 2005, available to top 5% by GPA undergraduate students each year

Technical skills

Languages: Python, R, Java, JavaScript, C#, Ruby

Databases: MySQL, MongoDB, SQL Server

Experience

Academic Services

The 14th International Conference on Mining Software Repositories (MSR 2017)
PC Member *2017*

Information and Software Technology
Reviewer *2014 – 2015*
Reviewed manuscript No. INFSOF-D-14-00238 and INFSOF-D-14-00238R1

The 11th Working Conference on Mining Software Repositories (MSR 2014)
Reviewer *2014*
Reviewed Submission #10 and #19

The 35th International Conference on Software Engineering (ICSE 2013) **San Francisco, CA**
Student Volunteer *2013*

The 9th Working Conference on Mining Software Repositories (MSR 2012)
Reviewer *2012*
Reviewed Submission #46 and #55

The 25th IEEE International Conference on Software Maintenance
Subreviewer *2009*
Reviewed Submission #157

Technical

Microsoft Corporation **Redmond, WA, USA**
Software Engineer *2015–present*
Building statistical models for the Windows build system, in order to detect abnormal processes, identify factors affecting build time, provide estimates for build time, and propose measures for Windows build performance at different granularity

University of California **Santa Cruz, CA, USA**
Graduate Student Researcher *2010 – 2015*
Projects:
- Worked on CHEKOFV project, funded by DARPA's CSFV program, that tried to build games for crowd sourced formal verification. In the first game, *Xylem*, I worked as the main backend (Node.js and Express) developer and one of key developers of the game client (ActionScript 3). In the second game, *Binary Fission*, I worked as the main backend (Python and Flask) developer.
- Worked on a NASA funded project *Understanding the Design Space of Mixed Initiative Robot Design Tools*, developed the prototype, *Botprint* in JavaScript. It used Raphael.js to sketch the robot chassis in 2D, and Three.js to render it in 3D.
- Worked on a NSF funded project on bug prediction. Extended the open source project *CVSAnalY* to identify commits that introduce buggy code chunks.

Microsoft Corporation **Redmond, WA, USA**
SDET Intern *2014*
Built machine learning models to predict Windows build time and analyzed factors are most likely to cause build breaks

Google Inc. **Mountain View, CA, USA**
Software Engineering Intern *2013*
Developed a JavaScript fuzzer that generates random JavaScript to test Closure Compiler.

Hoolai Social Game Ltd **Beijing, China**
Part-time Software Engineer, Database Administrator, System Administrator *2008 – 2009*
- Developed several social network games using Ruby On Rails and Adobe Flex, one of which had more than 600 thousand Daily Active Users at its peak
- Setting up and maintaining a web infrastructure comprised of an Nginx/lighttpd server as load balancer, and several Nginx/lighttpd servers with several Phusion Passenger processes on each server to process more than 10 million HTTP requests every day
- Configuration and optimization of the MySQL and Memcached servers

Xiamen Shepherd Co., Ltd **Xiamen, China**
Intern *2007*
Used ROR and adopted Extreme Programming practices to develop several projects, including a Agile development management system AgilePlanner and an on-line music composition website ComposeItYourself.

Teaching

University of California **Santa Cruz, CA, USA**
Teaching Assistant *2011*
Courses: *Machine Learning and Data Mining*, *Introduction to Database Management Systems*, and *Introduction to Computer Science*

Publications

Kate Compton, Heather Logas, Joseph C. Osborn, Chandranil Chakrabortti, Kelsey Coffman, Daniel Fava, Dylan Lederle-Ensign, Zhongpeng Lin, Joe Mazeika, Afshin Mobramaein, Jonathan Pagnutti, Huascar Sanchez , Jim Whitehead, Brenda Laurel and John Murray. Design lessons from binary

fission: A crowd sourced game for precondition discovery. In *Proceedings of 1st International Joint Conference of DiGRA and FDG*, Dundee, Scotland, UK, 2016.

Zhongpeng Lin. *Understanding and Simulating Software Evolution*. PhD thesis, University of California, Santa Cruz, December 2015.

Zhongpeng Lin and Jim Whitehead. Why power laws? an explanation from fine-grained code changes. In *Proceedings of the 12th Working Conference on Mining Software Repositories (MSR 2015)*, pages 68–75, Florence, Italy, May 2015.

Kate Compton, Dylan Lederle-Ensign, Zhongpeng Lin, Joe Mazeika, Afshin Mobramaein, Jonathan Pagnutti, Huascar Sanchez and Jim Whitehead. Botprint: Casual robotic evolution. In *Computational Creativity and Games Workshop*, Park City, UT, USA, 2015.

Zhongpeng Lin and Jim Whitehead. Using fine-grained code change metrics to simulate software evolution. In *Proceedings of the 5th International Workshop on Emerging Trends in Software Metrics (WETSoM 2014)*, pages 15–18, Hyderabad, India, June 2014. ACM Press.

Heather Logas, Jim Whitehead, Michael Mateas, Richard Vallejos, Lauren Scott, Dan Shapiro, John Murray, Kate Compton, Joseph Osborn, Orlando Salvatore, Zhongpeng Lin, Huascar Sanchez, Michael Shavlovsky, Daniel Cetina, Shayne Clementi and Chris Lewis. Software verification games: Designing Xylem, the code of plants. In *Proceedings of the 9th International Conference on the Foundations of Digital Games (FDG 2014)*, 2014.

Zhongpeng Lin, Chris Lewis, Sri Kurniawan, and Jim Whitehead. Why players start and stop playing a Chinese social network game. *Journal of Gaming & Virtual Worlds*, 5(3):307–328, 2013.

Zhongpeng Lin. Understanding and simulating software evolution. In *Proceedings of the 35th International Conference on Software Engineering (ICSE 2013)*, pages 1411–1414, San Francisco, CA, USA, May 2013. IEEE/ACM.

Chris Lewis, Zhongpeng Lin, Caitlin Sadowski, Xiaoyan Zhu, Rong Ou, and E. James Whitehead Jr. Does bug prediction support human developers? findings from a google case study. In *Proceedings of the 35th International Conference on Software Engineering (ICSE 2013)*, pages 372–381, San Francisco, CA, USA, May 2013. IEEE/ACM.

Caitlin Sadowski, Chris Lewis, Zhongpeng Lin, Xiaoyan Zhu, and E. James Whitehead. An empirical analysis of the fixcache algorithm. In *Proceeding of the 8th Working Conference on Mining Software Repositories (MSR 2011)*, pages 219–222, Honolulu, HI, USA, May 2011. ACM Press.

Jing Du, Ye Yang, Zhongpeng Lin, Qing Wang, Mingshu Li, and Feng Yuan. A case study on usage of a software process management tool in china. In *Proceedings of the 2010 Asia Pacific Software Engineering Conference*, pages 443–452, Sydney, Australia, November 2010. IEEE Computer Society.

Zhongpeng Lin, Fengdi Shu, Ye Yang, Chenyong Hu, and Qing Wang. An empirical study on bug assignment automation using chinese bug data. In *Proceedings of the 3rd International Symposium on Empirical Software Engineering and Measurement*, pages 451–455, Lake Buena Vista, FL, USA, October 2009. IEEE.