

# Yixin Luo

# Curriculum Vitae

## Education

2012–2017 **Ph.D of Computer Science**, *Carnegie Mellon University*, Pittsburgh, PA. Advised by Prof. Onur Mutlu

2010–2012 **Bachelor of Computer Engineering**, *University of Michigan*, Ann Arbor, MI. Dean's List 2010, 2011, EECS Scholar 2010

2008–2012 **Bachelor of Electrical Engineering**, *Shanghai Jiao Tong University*, Shanghai, China. Dean's List 2009

## Experience

2015, 2016 Engineering Intern, SEAGATE TECHNOLOGY, Lakeview, CA.

Worked with Dr. Erich Haratsch on developing new firmware architectures for next-generation SSD controllers using state-of-the-art NAND flash memories.

Detailed achievements:

- $\circ$  Developed 10 new techniques and 4 new models to improve SSD lifetime by up to  $12.9 \times$
- Developed new tool to automatically test and analyze seven types of SSD errors
- Collected and analyzed 700 GB of SSD error data from real devices using machine learning and statistical modeling techniques
- 2013 Research Intern, MICROSOFT RESEARCH, Redmond, WA.

Worked with Dr. Jie Liu on developing new server architectures to tolerate memory errors in large-scale data centers.

Detailed achievements:

- Developed a new server architecture to reduce datacenter TCO by 2.7%
- Characterized memory error vulnerability of three important production data-intensive applications running in datacenters

#### **Awards**

- 2017 DFRWS EU Best Paper Award
- 2015 HPCA Best Paper Runner Up
- 2012 HPCA Best Paper Award

# Computer skills

Advanced C++, Python, Matlab, Shell, Verilog, LATEX

Intermediate Perl, HTML, Windows Batch, TensorFlow, PyTorch

Tools Intel Pin, HSPICE, Cadence tools, gem5, Multi2Sim, MySQL/PostgreSQL

## Conference Talks

2010 Oral Presentation at the California Business Conference

2009 Poster at the Annual Business Conference in Oregon

# Languages

English Mothertongue

Spanish Intermediate

Dutch Basic

Conversationally fluent Basic words and phrases only

## Interests

- Piano

- Cooking

- Running

- Chess

- Dancing