Rongzhong Li

Departments of Physics and Computer Science
Wake Forest University
Winston Salem, NC, 27106, USA

Email: *rzlib2l@gmail.com* ✉
Portfolio: ***http://borntoleave.github.io***
LinkedIn: *http://www.linkedin.com/in/RongzhongLi*

Education

Wake Forest University, Winston-Salem, NC, USA
- Master of Science in Computer Science — Aug 2014 ~ May 2016
- Ph.D. in Physics — Aug 2010 ~ May 2015

Kuang Yaming Honors School, **Nanjing University**, Jiangsu, China
- Bachelor of Science in Physics — Sep 2006 ~ Jun 2010

Research Experience

Wake Forest University
- Research Assistant, Department of Computer Science — Jan 2015 ~ May 2016

Work with **Dr. Paúl Pauca** on the Boeing and WFU collaborative project to analyze GBs of sensor data to classify fiber failures using machined learning algorithms.

- Research Assistant, Department of Physics — Aug 2011 ~ May 2015

Worked in **Dr. Samuel Cho**'s Computational Biophysics Group and developed codes to setup molecular dynamics simulations, analyze TBs of coordinates, and visualize results.

Publications

First author of 5 peer-reviewed papers including:

- **Li R**, Stevens CA, Cho SS. Molecular dynamics simulations of protein-nanoparticle biocorona formation. *Modeling, Methodologies and Tools for Molecular and Nano-scale Communications*, Eds. Junichi Suzuki, Tadashi Nakano. ***Springer Publishing***. (in press, book chapter) 2016

- **Li R**. A true random number generator algorithm from digital camera image noise for varying lighting conditions. ***IEEE Southeast Conference***. 2015

- **Li R**, Ge H, Cho SS. Sequence-dependent base stacking interactions guide tRNA folding energy landscapes. ***J. Phys. Chem. B***. 2013

Provisional Patents

- System for identification of composite failure mechanisms with acoustic emission. 2016
- Devices, methods, and programs for true random numbers using digital camera. 2015

Projects

- Star-trail Photography Simulator (iOS image editing app during VTHacks) — Feb 2016
- Traditional Chinese Family Tree Builder (database and visualization) — Aug 2015
- Pocket Cube with Hint (interactive Mathematica game) — May 2015
- Nano Fiber Measurer (Mathematica tool package for experimentalists) — Aug 2014
- Handmade Metal Irish Whistle (machine shop project) — Mar 2012 ~ Jun 2012

Teaching Experience

- Taught Physics 266, Intermediate Laboratory (30 students/semester), WFU — 2015
- Taught Physics 110, Introductory Physics (20 students/semester), WFU — 2010 ~ 2015

Extra-curricular Activities

- Compiled a personal poetry collection of 110 poems (a 30k-word book). — 2006 ~ 2016
- Organized the individual CV review sessions for 9 physics and CS graduates. — 2016
- Coached as the student mentor for 3 undergraduates's research projects. — 2013 ~ 2015
- Photographer and BBS admin for WFU Chinese Student & Scholars Association. — 2013

Academic Awards

- Wake Forest University Graduate School Summer Research Support — 2015
- Wake Forest University Graduate School Alumni Student Travel Award — 2012 & 2015

Skills

C/C++; Mathematica; Matlab; Shell scripts; Python; Git; CUDA; JavaScript; Gnuplot; Linux; LaTeX; SQL; Photography; Photoshop; Raspberry Pi; AutoCAD; 3D printer; Machine shop.

Last Updated: May 2016