

# Mohan Li

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## Education

<b>University of Illinois</b>	Urbana-Champaign, IL
<i>Ph.D. student, Nuclear, Plasma and Radiological Engineering, May 2020 (expected)</i>	
<b>University of Illinois</b>	Urbana-Champaign, IL
<i>MS, Nuclear, Plasma and Radiological Engineering, July 2018</i>	
<b>Tsinghua University</b>	Beijing, China
<i>BE, Engineering Physics, July 2015</i>	

## Experience

<b>Research assistant, University of Illinois at Urbana-Champaign</b>	Urbana, IL
Development of a head-and-neck cancer dedicated PET system	
<ul style="list-style-type: none"><li>Investigated system performance through Monte Carlo simulation in GATE</li><li>Developing a high-resolution DOI detector module based on SiPM and segmented LYSO</li></ul>	
Influence of channel configuration on bandwidth of CZT detector with a cross-strip pattern	
<ul style="list-style-type: none"><li>Investigated bandwidth of a cross-strip CZT detector with different readout electrode pattern</li></ul>	
<b>Undergraduate researcher, Tsinghua University</b>	Beijing, China
Separation of scintillation and Cherenkov lights in linear alkyl benzene (LAB)	
<ul style="list-style-type: none"><li>Implemented trigger logic on a Flash ADC (CAEN VX1751) by FPGA programming</li><li>Built the DAQ system based on Maximum Integrated Data Acquisition System</li><li>Designed a waveform-analysis algorithm and measured LAB time constants and light yield</li></ul>	
Assay of low-background stainless steel by smelting for the neutrino experiment at Jinping	
<ul style="list-style-type: none"><li>Measured the radioactivity of raw materials of stainless steel with a high-purity germanium detector</li><li>Designed an auto-search algorithm and identified the radionuclide type and activity</li></ul>	
<b>Summer undergraduate researcher, DESY</b>	Hamburg, Germany
Adding particle hit errors to EUDET-type beam telescopes	
<ul style="list-style-type: none"><li>Implemented particle hit error into the pixel telescope data analysis framework EUTelescope</li></ul>	

## Honors and Awards

<b>University of Illinois at Urbana-Champaign</b>	
<ul style="list-style-type: none"><li>Cancer Scholars for Translational and Applied Research Graduate Fellowship</li><li>Graduate College Conference Travel Award</li></ul>	2018 2017
<b>Tsinghua University</b>	
<ul style="list-style-type: none"><li>National Training Programs of Innovation and Entrepreneurship Award</li><li>Academic Excellence Scholarship</li></ul>	2015 2012, 2013, 2014
<b>Deutsches Elektronen Synchrotron (DESY)</b>	
<ul style="list-style-type: none"><li>Best summer student in DESY ATLAS group (1/15)</li></ul>	2014

## Skills

- Programming: C++, Python, CUDA, TensorFlow, R, FPGA, Matlab, HTML/CSS
- Hardware: PMT, SiPM, CZT, scintillator, Flash ADC, CMOS camera, HPGe detector

## Selected Publications (2 of 5, total citation 53)

- Li, M.,** Guo, Z., Yeh, M., Wang, Z., & Chen, S. (2016). "Separation of scintillation and Cherenkov lights in linear alkyl benzene." *Nucl. Instr. Meth. A*, 830, 303-308.
- Li, M.,** and Abbaszadeh, S. "Influence of channel configuration on bandwidth of cadmium zinc telluride detector with a cross-strip pattern." *Radiat. Phys. Chem.*.