Mohan Li

104 S. Wright St, Urbana, IL 61801 • 217-904-8837 • limohan16@gmail.com • mohanli2.github.io

Education

University of Illinois at Urbana-Champaign May 2020
Ph.D. Candidate, Radiological Engineering, GPA: 3.7/4.0

University of Illinois at Urbana-Champaign July 2018
Master of Science, Radiological Engineering, GPA: 3.7/4.0

Related Courses

Distributed Systems	Computer Vision	Parallel Programming
Random Processes	Statistical Learning	Applied Regression and Design

Tsinghua University July 2015
Bachelor of Engineering, Engineering Physics, GPA: 89.4/100.0

Skills

- Programming: Proficient in **C++** (CUDA), Python (scikit-learn, TensorFlow), C#, SQL, Linux, HTML/CSS

Work & Project Experience

Software Development Internship, Canon Medical Research USA, Inc. Chicago, IL
Augmented reality (AR) based CT demo Summer 2019

- Investigated **Unity** API samples of Magic Leap One for controlling mixed reality virtual objects
- Applied clinical CT image segmentation for personalized patient model and AR-assisted surgery
- Developed an AR demo in **C#** for simplifying CT scan protocol and 3D-visible CT marketing

University of Illinois at Urbana-Champaign Urbana-Champaign, IL
Organ-dedicated PET system Feb 2017 - Present

- Evaluated system performances through Monte Carlo simulation for optimized system design
- Designed a high-resolution and depth-of-interaction capable detector for building the PET system

Melbourne housing market (Statistical Learning course project) Spring 2018

- Applied data cleaning, feature selection and normalization for data preprocessing
- Predicted housing price in **Python** by training statistical regression models

Distributed transactions (Distributed Systems course project) Spring 2019

- Developed a distributed transaction systems based on remote method invoke (RMI) by Pyro4
- Implemented a active read and write deadlock detection strategy

Intern, Deutsches Elektronen Synchrotron DESY Hamburg, Germany
EUTelescope data analysis platform Summer 2014

- Estimated particle hit error in pixel telescopes for improving particle tracking accuracy
- Implemented new features in **C++** to the EUTelescope data analysis platform in **Linux**

Honors and Awards

University of Illinois Urbana-Champaign

- Cancer Scholars for Translational and Applied Research Graduate Fellowship 2018-2020

Deutsches Elektronen Synchrotron DESY

- Best summer student in DESY ATLAS group (1/15) 2014

Selected Publications (2 of 9, total citation: 104)

- **Li, M.**, & Abbaszadeh, S. (2019). "Depth-of-interaction study of a dual-readout detector based on TOF-PET2 application-specific integrated circuit." *Physics in Medicine & Biology*.
- **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.