Shao-Chun Lee

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Education

University of Illinois at Urbana Champaign, *IL, USA*　　　Aug. 2017-present

Ph.D. Nuclear, Plasma, and Radiological Engineering (NPRE)
- ✓　Expected Ph.D. Degree Completion: Jul. 2024

National Tsing Hua University, *Hsinchu, Taiwan*　　　Feb. 2017-Feb. 2019
Master of Institute of Nuclear Engineering and Science (NTHU-NES)
- ✓　Earned **4.3/4.3 GPA** in courses relative to nuclear engineering and radiological sciences
- ✓　Studied Radiation Detection and Measurement, Radiation Dosimetry, Health Physics, Physics of Particle Therapy, Two-phase Flow & Boiling Heat Transfer

National Tsing Hua University, *Hsinchu, Taiwan*　　　Sept. 2013-Jan. 2017
Bachelor of Department of Engineering and System Science, College of Nuclear Science (NTHU-ESS)
- ✓　Earned **4.23/4.3 GPA** in diversify courses
- ✓　Studied Monte Carlo Method, Radiation Safety, Nuclear Power Reactor Safety, Reactor Physics I, Nuclear Reactor Dynamics, Nuclear Power Plant Risk Assessment, Computational Fluid Dynamics and Heat Transfer

Appointments

Aug. 2019-present　　**Research Assistant**

　　　　　　　　　　Yang Zhang's Research Group

Research interests

Particle Transport Monte Carlo, Molecular dynamics

Research experience

Feb. 2017　　　　Monte Carlo Source Modeling For Dose Calculation in Proton Therapy
Mar. 2018　　　　Epidemiology Survey in Peripheral Areas of Nuclear Power Plant in Taiwan

Research publications

- ✓　Zi-Yi Yang, Pi-En Tsai, **Shao-Chun Lee**, Yen-Chiang Liu, Chin-Cheng Chen, Tatsuhiko Sato and Rong-Jiun Sheu, "Inter-comparison of Dose Distributions Calculated by FLUKA, GEANT4, MCNP, and PHITS for Proton Therapy," 13th International Conference on Radiation Shielding & 19th Topical Meeting of the Radiation Protection and Shielding Division of the American Nuclear Society, Paris, France (2016)
- ✓　Wen-Chyi Tsai, Zi-Yi Yang, **Shao-Chun Lee**, Jeng-Wei Lin, Shiang-Huei Jiang, "Measurement of gamma-ray dose and neutron activation in BNCT beams using TLD-200," 18th International Congress on Neutron Capture Therapy, Taipei, Taiwan (2018)
- ✓　Zi-Yi Yang, **Shao-Chun Lee**, Rong-Jiun Sheu and Chin-Cheng Chen, "Independent Monte Carlo-based Dose Verification Program for Proton Pencil Beam Scanning," 57th Annual Conference of the Particle Therapy Co-operative Group, Yokohama, Japan (2017)

Honors and awards

- ✓ Honorable Mention in Hult Prize@NTHU (2017)
- ✓ Research Creativity Award from the Ministry of Science and Technology, "Monte-Carlo based dose calculation and verification program for pencil beam scanning proton therapy using Python" (2017)

Technical Skills

C, C++, Python, Linux, GEANT4, PHITS, MCNP, Fluent