

# Curriculum Vitae

## Seongpil Yum



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### AFFILIATION

Researcher of Nuclear Engineering  
Ulsan National Institute of Science & Technology (UNIST)  
UNIST-gil 50, Ulsan Metropolitan City, Republic of Korea, 689-798

### EDUCATION

Undergraduate

- 1<sup>st</sup> track: Nuclear Science & Engineering
- 2<sup>nd</sup> track: Physics
- UNIST, Ulsan, Korea, (2010.3 - Present)

### WORK EXPERIENCE

- Internship
  - Korea Hydro & Nuclear Power Central Research Institute (KHNP, June 26 ~ August 5, 2016)
  - University of Illinois Urbana-Champaign, Analysis of Reactor Transients and Stability laboratory (UIUC, January 2 ~ February 24, 2017)

### CERTIFICATES

- Awards & Scholarship
  - Nuclear Technology Undergraduate Student Society Scholarship, National Research Foundation of Korea (June 2016 ~ June 2017)
- Training (Domestic)
  - Nuclear engineering experiment training course (KAERI, August 29 ~ September 2, 2016)
  - Nuclear Reactor Core Design Theory and Training course (KAERI, June 27 ~ June 30, 2017)
  - Tachyon2 System training course (KISTI, July 7, 2017)
- Training (Domestic)
  - KUCA Experiment Kyoto University (Osaka, October 10 ~ October 13, 2017)
- Computer skills
  - MATLAB
  - FORTRAN
  - MATHEMATICA
  - PERL
- Reactor Core Analysis Code
  - CASMO

- SIMULATE
- MCS
- RASTK

### **International and Domestic Conferences**

1. **Seongpil Yum**, Jaemin Kim, Ho Cheol Shin, Minyong Park, Jiwon Choe, Peng Zhang, and Deokjung Lee\* (2016), “Accuracy Improvement of Axial Power Shape Reconstruction Using GMDH Algorithm”, *Transactions of the Korean Nuclear Society Autumn Meeting*, Gyeongju, Korea, October 27-28, 2016(accepted for poster)
2. **Seongpil Yum**, Ho Cheol Shin, Minyong Part, Jiwon Choe, Peng Zhang, and Deokjung Lee\* (2017), “Application of GMDH to Cross Section Functionliaztion”, *International Conference on Mathematics & Computational Methods Applied to Nuclear Science & Engineering*, Jeju, Korea, April 16-20, 2017 (accepted for poster)
3. **Seongpil Yum**, Jiwon Choe, Sooyoung Choi, Peng Zhang, and Deokjung Lee\* (2017), “Pin-by-pin core calculation with SPH factor for improving accuracy of pinwise calculation”, *Transactions of the Korean Nuclear Society Spring Meeting*, Jeju, Korea, May 18-19, 2017 (accepted for poster)
4. **Seongpil Yum**, Ho Cheol Shin, Jiwon Choe, Peng Zhang, Farrokh Khoshahval and Deokjung Lee\* (2017), “Application of GMDH to Cross Section Functionliaztion”, *Proceedings of the Reactor Physics Asia 2017 (RPHA17) Conference*, Chengdu, China, Aug 24-25, 2017 (accepted for presentation)

### **PUBLICATIONS SCI Journal**

1. Farrokh Khoshahval, **Seongpil Yum**, Peng Zhang, Jiwon Choe, Ho Cheol Shin, and Deokjung Lee\* (2017), “Smart Sensing of the Axial Power and Offset in NPPs using GMDH Method”, *Computer Physics Communications*, Under review

### **ENGLISH CERTIFICATION**

TOEIC 850

### **UNDERGRADUATE COURSES TAKEN**

Fundamentals of Nuclear Engineering  
Introduction to Nuclear Reactor Theory  
Introduction to Nuclear Fuel Cycle Engineering  
Introduction to Nuclear Reliability Engineering  
Nuclear Reactor Numerical Analysis  
Nuclear Materials Engineering & Experiment  
Nuclear Radiation Engineering & Experiment  
Nuclear Engineering Design and Lab IV  
Differential Equations  
Applied Linear Algebra  
Mathematical Physics I  
Quantum Physics I  
Solid Mechanics I  
Fluid Mechanics  
Fundamentals of Electromagnetics

October 11, 2017

Electromagnetism I  
Thermodynamics of Materials  
Engineering Programming I, II