

YOUNGSIK CHOI

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youngsik-choi.github.io

(Updated on May. 20, 2022)

EDUCATION

- PhD** **Texas A&M University**, Mechanical Engineering - *Building Energy & HVAC* May. 2022 –
Advisor: Prof. Zheng O'Neill
- MS** **Seoul National University**, Architectural Engineering - *Building Simulation* Mar. 2020 – Feb. 2022
Advisor: Prof. Cheol-Soo Park
Thesis: 'Stochastic Setpoint Temperature Learning for Occupant Behavior-based Control'
- BS** **Seoul National University**, Architectural Engineering Mar. 2014 – Feb. 2020
2-year absence to fulfill mandatory military service (Aug. 2016 – Jul. 2018)
- Peking University**, College of Engineering Jul. 2016
International Exchange Student (Summer session offered in English)

FIELDS OF INTEREST

Building Energy Modeling & Simulation, Occupant Behavior, Building HVAC Control, Machine Learning

EXPERIENCE

- Research Assistant**, Texas A&M University May. 2022 –
- Teaching Assistant**, Seoul National University Sep. 2020 – Feb. 2021
- 400.418 Creative Engineering Design, undergraduate course

HONORS AND AWARDS

- Poster Session Award Winner (runner-up)** Dec. 14, 2020
The 2020 Winter Simulation Conference
- Organization Scholarship** Sep. 2020 – Feb. 2022
Full tuition, The Education and Research Foundation of Seoul National University
- Eminence Scholarship** Mar. 2016 – Feb. 2020
Full tuition, Seoul National University
- Certificate of Appreciation** May. 3, 2018
2018 Key Resolve R.O.K & U.S. Joint Exercise (Took charge of translation)
- Organization Scholarship** Sep. 2015 – Feb. 2016
Full tuition, Moon-Ju Scholarship Foundation
- Merit-based Scholarship** Mar. 2015 – Aug. 2015
40% tuition, Seoul National University

PROJECTS

- Optimizing Supply Air Temperature Control for Dedicated Outdoor Air Systems (@ TAMU)** May. 2022 –
Development of BEMS Algorithms (@ SNU) Jun. 2020 – Feb. 2021
Development of Real-time Diagnosis Technology of Home Energy Usage and Smart & Autonomous Control/Management System (@ SNU) Jan. 2020 – Feb. 2022

CONFERENCE PROCEEDINGS

- Choi, Y.**, Shin, H.S., Cho, S., Ko, Y.D. and Park, C.S. (2020), Predictive Uncertainty of Residential Building Energy Model, Proceedings of the 2020 Winter Simulation Conference (*Best Poster Award*)
- Choi, Y.**, Yi, D.H., Shin, H., Chu, H.G., Yoo, S. and Park, C.S. (2020), Application of transfer learning to a simulation model for room air temperature, Proceeding of Annual Conference of the Architectural Institute of Korea, Vol. 40-2, pp. 386-387
- Choi, Y.**, Shin, H., Ko, Y., Cho, S. and Park, C.S. (2020), Predictive uncertainty of energy simulation model using Deep Ensembles, Proceeding of Annual Conference of the Architectural Institute of Korea, Vol. 40-1, pp. 290-291

TECHNICAL SKILLS

- Building Simulation:** Building energy simulation, Uncertainty analysis, Numerical methods, Machine Learning
- Programming:** Python, Visual Basic, Arduino

OTHER EXPERIENCE

- Hyundai Engineering and Construction** Dec. 2018 – Feb. 2019
- Worksite manager
- Republic of Korea Naval Mobile Construction Squadron** May. 2017 – Jul. 2018
- Construction engineer & translator (mandatory military service)
- Republic of Korea Naval Academy** Oct. 2016 – Apr. 2017
- Building facility manager (mandatory military service)