

Curriculum Vitae

Name: **Yonghwi Kim**
Affiliation: School of Mechanical Engineering
Sungkyunkwan University, Republic of Korea
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Education

2017 Feb. **B.S.E.** in Civil Engineering, Ajou University, Gyeonggi-do, Republic of Korea
2019 Feb. **M.S.** in Mechanical Engineering, Sungkyunkwan University, Gyeonggi-do, Republic of Korea

Research Interests

- Metal 3D Additive manufacturing
- Computational mechanics (non-linear finite element methods, multi-physics)
- High temperature experiments (creep, fatigue, creep-fatigue, small punch test)

Research Experiences

2018-2020 **Research Assistant** at Convergence System Design Lab, Sungkyunkwan University, Republic of Korea

- Life Log, Big Data, Intelligent Customizing Character, Platform, Business Model (2018-2018, NRF)
- Reverse Engineering, 3D Printing, Standardization, Nuclear Fuel Components, Control Valve (2018-2020, NRF)

- Companionship, Companionship IoT device Interaction, Human Centered Design, Life Logging Computing, Self-Quantification (2019-2019, NRF)

2020-present **Research Assistant** at Material Strength & Computational Bioengineering Lab, Sungkyunkwan University, Republic of Korea

- Next Generation Lifetime Assessment of High Temperature Materials in Nuclear Power Plants using Small Punch Test (2019-2020, NRF)

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Awards and honors

Publications

Journal Articles:

- [1] **Kim, Y. H.**, Ryu, J., Nam, C., Choi, J., & Kim, M. K. Stiffness analysis of new spacer grid model for metal 3D additive manufacturing. *Journal of Mechanical Science and Technology*, 2022, 1-7.

Conference Proceedings and Posters:

- [2] **Kim, Y. H.**, Kim, “[Structural Analysis of Bus Frame for Fixed Tempered Glass Breakers](#)”, *The KSME Annual Spring Conference*, Busan, May, 2022
- [1] **Kim, Y. H.**, Kim, M. K., & Choi, J. B. “[Comparison of Stiffness According to Shape of Spacer Grid](#)”, *Transactions of the Korean Nuclear Society Spring Meeting Jeju*, Korea, May 23-24, 2019