KSBMR Research Workshop

17:20-17:50 | Grand Hall 1, B1F

Session 3. Transforming Healthcare with AI: Technologies and Policy-Driven Research

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Educational Background & Professional Experience

2022.3-Present Associate Research Engineer, Al Team, ClariPi Research

2020.4–2025.2 Ph.D. in Engineering, Graduate School of Convergence Science and Technology, Seoul National University

Research Interests

Musculoskeletal (MSK) Image Processing
Al based Medical Image Processing
Osteoporosis and Vertebral Compression Fracture

Publications

- 1. Lee, J., Kim, M., Park, H., Yang, Z., Woo, O. H., Kang, W. Y., & Kim, J. H. (2025). Enhanced Detection Performance of Acute Vertebral Compression Fractures Using a Hybrid Deep Learning and Traditional Quantitative Measurement Approach: Beyond the Limitations of Genant Classification. Bioengineering, 12(1), 64.
- 2. Lee, J., Park, H., Yang, Z., Woo, O. H., Kang, W. Y., & Kim, J. H. (2024). Improved Detection Accuracy of Chronic Vertebral Compression Fractures by Integrating Height Loss Ratio and Deep Learning Approaches. Diagnostics, 14(22), 2477.
- 3. Lee, J., Park, C., Cho, M., Choi, Y. H., & Kim, J. H. (2024, April). Age-dependent generalizability of lumbar spine detection and segmentation models: a comparative study in pediatric populations. In Medical Imaging 2024: Image Processing (Vol. 12926, pp. 548–553). SPIE.
- 4. Kang, W. Y., Yang, Z., Park, H., Lee, J., Hong, S. J., Shim, E., & Woo, O. H. (2024). Automated Opportunistic Osteoporosis Screening Using Low–Dose Chest CT among Individuals Undergoing Lung Cancer Screening in a Korean Population. Diagnostics, 14(16), 1789.
- 5. Park, H., Kang, W. Y., Woo, O. H., Lee, J., Yang, Z., & Oh, S. (2024). Automated deep learning—based bone mineral density assessment for opportunistic osteoporosis screening using various CT protocols with multi–vendor scanners. Scientific Reports, 14(1), 25014.





