

Curriculum Vitae

Prof. Young Hoon Jo

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Department of Cultural Heritage Conservation Sciences
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Prof. Young Hoo Jo

Conservation Scientist
Digital Heritage Expert



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Lab of Digital Conservation Solution



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EXPERIENCE

- 2015 – Present Assistant / Associate / Full Professor, Dept. of Cultural Heritage Conservation Sciences, Kongju National University, Republic of Korea
- 2019 – Present Expert member, ICOMOS-ISCS
- 2021 – Present Director, Digital Heritage Festa
- 2023 – Present Heritage expert member, Korea Heritage Service
- 2024 – 2025 Exhibition & Sponsor Chair, CIPA 2025 SEOUL
- 2024 – Present Editor-in-Chief, *Journal of Conservation Science*

RESEARCH INTERESTS

- Conservation science
- Digital heritage
- Condition diagnosis
- Non-destructive testing
- Digital recording & documentation
- Digital analysis & interpretation
- Digital restoration & replication
- Stone heritage conservation

EDUCATION

- 2000 – 2006 Bachelor of Science, Dept. of Cultural Heritage Conservation Sciences, Kongju National University
- 2006 – 2008 Master of Science, Dept. of Cultural Heritage Conservation Sciences, Kongju National University
- 2008 – 2011 Ph.D. of Science, Dept. of Cultural Heritage Conservation Sciences, Kongju National University

HONORS AND AWARDS

- 2022 Minister's Award, Ministry of Culture, Sports and Tourism
- 2022 Mayor's Award, Gongju City
- 2024 Director's Award, Buyeo National Museum
- 2025 Director's Award, Korea Heritage Service

Contribution to the Field of Digital Heritage
Contribution to the Digital Heritage Festa
Contribution to the Field of Digital Heritage
Contribution to the Field of Digital Heritage

MUSEUM EXHIBITIONS

- Exhibited more than 20 digital conservation science contents at the National Museum
- National Chuncheon Museum (2018; 2020), National Jinju Museum (2018), National Museum of Korea (2019; 2020; 2021), National Naju Museum (2020), National Gwangju Museum (2021) National Buyeo Museum (2021; 2022), National Gyeongju Museum (2022), National Science Museum (2022; 2023; 2024)

RESEARCH ACHIEVEMENTS

SCIE Papers	SCOPUS Papers	KCI Papers	Patents
13	13	51	6

● SICE PAPERS (after 2017)

- Y. H. Jo, D. Kim, N. Davaadorj, 2025, Combining optical scanning and X-ray computed tomography data for modeling the internal and external geometries of cultural artifacts. *Applied Sciences*, 15, 6239.
- Y. H. Jo, Y. H. Kim, H. S. Lee, 2024, Three-dimensional deviation analysis and digital visualization of shape change before and after conservation treatment of historic kiln site. *Heritage Science*, 12, 76.
- Y. H. Jo, C. H. Lee, 2022, Weathering features of a five-story stone pagoda compared to its quarrying site in Geumgolsan Mountain, Korea. *Environmental Earth Sciences*, 81, 181.
- Y. H. Jo, C. H. Lee, 2022, Ultrasonic properties of a stone architectural heritage and weathering evaluations based on provenance site, *Applied Sciences*, 12, 1498.
- Y. H. Jo, S. Hong, S. Y. Jo, Y. M. Kwon, 2020, Noncontact restoration of missing parts of stone Buddha statue based on three-dimensional virtual modeling and assembly simulation, *Heritage Science*, 8, 1-12.
- S. H. Kim, C. H. Lee, Y. H. Jo, 2020, Behavioral characteristics and structural stability of the walls in the ancient Korean Royal Tombs from the sixth century Baekje Kingdom, *Environmental Earth Sciences*, 79, 1-13.
- Y. H. Jo, S. Hong, 2019, Three-dimensional digital documentation of cultural heritage site based on the convergence of terrestrial laser scanning and unmanned aerial vehicle photogrammetry, *ISPRS International Journal of Geo-Information*, 8, 1-14.
- Y. H. Jo, S. M. Lee, C. H. Lee, 2018, Material characteristics and building technique for the rammed earth wall of the 13th Korean fortress in Ganghwa, *Environmental Earth Sciences*, 71, 617.
- C. H. Lee, Y. H. Jo, 2017, Correlation and correction factor between direct and indirect methods for the ultrasonic measurement of stone samples, *Environmental Earth Sciences*, 76, 477.

● SCOPUS PAPERS (after 2017)

- H.R. Song, Y.H. Jo, 2025, Study on the color characteristics of reproduced oil paintings using a machine learning algorithm. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLVIII-M-9-2025, 1395-1400.
- M.J. Kim, D.Y. Lee, C.Y. Roh, Y.H. Jo, 2025, Conservation and restoration of Chimi from Mireuksa Temple Site, Iksan. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XLVIII-M-9-2025, 715-720.
- S. Son, Y.H. Jo, H.I. Gwak, H.S. Cho, K.C. Shin, 2023, A study on multi-modeling for artifact restoration. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLVIII-M-2-2023, 1479-1484.
- S.H. Kim, Y.H. Jo, J. Song, D.S. Kim, H.S. Kim, 2023, A study on convergence modeling of cultural artifact using X-ray computed tomography and three-dimensional scanning technologies. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLVIII-M-2-2023, 851-856.
- Hong, S., Y.H. Jo, 2021, A study on three-dimensional printing replication for usability of artifacts. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLVI-M-1-2021, 309-311.
- H.R. Song, Y.H. Jo, 2021, Digital color reproduction and documentation of oil painting using image processing. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLVI-M-1-2021, 693-695.
- Y. H. Jo, J. M. Yeo, Y. T. Kim, 2020, Applying digital virtual restoration and three-dimensional sand-printing for missing parts of Rampart Walls. *TEST Engineering & Management*, 83, 4387-4394.
- S.H. Kim, C.H. Lee, Y.H. Jo, 2019, Digital documentation and short-term monitoring on original rampart wall of the Gyejoksanseong Fortress in Daejeon, Korea. *Economic and Environmental Geology*, 52, 169-188.
- Y.H. Jo, J. Kim, N.C. Cho, C.H. Lee, Y.H. Yun, D.K. Kwon, 2019, A study on planning and platform for interactive exhibition of scientific cultural heritage. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLII-2/W15-2019, 605-607.
- Y.H. Jo, J.Y. Kim, 2017, Three-dimensional digital documentation of heritage sites using terrestrial laser scanning and unmanned aerial vehicle photogrammetry. *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, Volume XLII-2/W5-2017, 395-398.

● KCI PAPERS (after 2019)

- J.H. Park, Y.H. Jo, E.S. Bang, C.H. Lee, 2025, Analysis of topography and wall configuration at Gongsanseong Fortress in Gongju using UAV-LiDAR survey and geographic information system. *Journal of Conservation Science*, 41, 755-770.
- N. Davaadorj, Y.H. Jo, C.H. Lee, 2025, Structural analysis of outdoor cultural heritage using 3D scanning data retopology: The three-story stone pagoda in Beomhak-ri, Sancheong. *Conservation Science in Museum*, 34, 99-112.
- D.Y. Lee, Y.H. Jo, M.J. Kim, 2025, A study on manufacturing techniques of Chimi excavated from Mireuksaji Temple using digital visualization technology. *Conservation Science in Museum*, 34, 79-98.
- S. Kim, Y. H. Jo, H. Kang, Y.G. Choi, Y.H. Cho, 2025, Study on Segmentation Modeling and Contents Utilization of X-ray CT for the Daehan Rifle No. 7. *Journal of Conservation Science*, 41, 279-290.
- H. Song, Y. Jung, Y. H. Jo, Y.S. Shin, 2024, Invisible Condition Diagnosis and Character Decipherment of Traditional Ancient Maps Using Multispectral Imaging: Map of the Eight Provinces of the Eastern State (Dongguk Paldojido). *Conservation Science in Museum*, 32, 101-116.
- S. H. Yu, Y. H. Jo, M. K. Yun, Y. G. Chun, 2023, Study on the digital reassembly of Yoni Monument excavated from Cella of Hong Nang Sida, Lao PDR. *Journal of Conservation Science*, 39, 746-756.
- Y. H. Kim, Y. H. Jo, 2023, Study on influence factor analysis and optimal methodology for color reproduction of digital photography of painted cultural heritage. *Journal of Conservation Science*, 39, 621-631.
- J. Kim, Y.H. Jo, J.H. Ryu, S.B. Hwang, N. Davaadorj, 2023, Basic reexamination on of stone basin inscription in Buyeo, South Korea, using digital visualization technology. *Wooden Documents and Inscriptions Studies*, 30, 163-184.
- Y.H. Jo, S. Son, J. Kim, Y.R. Lee, J. Lee, 2023, A Study on making technique of clay buddha pedestal in Boniiri, Cheongyang, using three-dimensional visualization technology. *Journal of Asian Art History*, 16, 151-169.
- H.R. Song, Y.H. Jo, 2022, A study on digital color reproduction for recording color appearance of cultural heritage. *Journal of Conservation Science*, 38, 154-165.
- D.S. Kim, Y. H. Jo, I. K. Huh, S. M. Byun, 2022, Convergence modeling and reproduction of a Bigyeokjincheoloe (bomb shell) based on three-dimensional scanning and γ -ray radiography. *Journal of Conservation Science*, 38, 55-63.
- Y. H. Jo, J. Kim, Y. H. Yun, N.C. Cho, C. H. Lee, 2021, Developing experiential exhibitions based on conservation science content of bronze mirror, *Journal of Conservation Science*, 37, 362-369.
- Y.H. Jo, D.K. Kwon, J. Ahn, K. Ko, 2021, A study on the digital decipherment of the Goguryeo Stele in Chungju. *Korean Journal of Heritage : History and Science*, 54, 240-253.
- H. Choi, S. Hong, Y.H. Jo, N.C. Cho, 2021, Three-dimensional digital recording of the conservation treatment and form analysis of an iron ring pommel. *Conservation Science in Museum*, 25, 85-94.
- Y. H. Jo, J. Lee, 2021, Three-dimensional digital-mold modeling and sand-printing for replication of bronze mirror. *Journal of Conservation Science*, 37, 13-21.
- H. Yang, C.H. Lee, Y.H. Jo, 2020, Stability and damage evaluation of the Buddha Triad and 16 Rock-Carved Arhat Statues at Seongbulsa Temple in Cheonan, Korea. *Korean Journal of Heritage : History and Science*, 53, 78-99.
- Y. H. Jo, H. Song, S. Lee, 2020, Significance of three-dimensional digital documentation and establishment of monitoring basic data for the Sacred Bell of Great King Seongdeok. *Conservation Science in Museum*, 24, 55-74.
- G. Lee, Y. H. Jo, S.M., Lee, C.H. Lee, K. Lee, 2020, Structural safety evaluation of Tomb of King Muryeong in Tumulus of Songsan-ri through finite element analysis. *Journal of the Korean Association for and Spatial Structures*, 20, 63-70.
- Y. H. Jo, J. H. Park, E. Hong, W. Han, 2020, Three-dimensional digital documentation and accuracy analysis of the Choijin Lama Temple in Mongolia. *Journal of Conservation Science*, 36, 264-274.
- Y. H. Jo, D.K. Kwon, K. Ko, 2020, Application and consideration of three-dimensional scanning technology for decipherment of Goguryeo Stele in Chungju. *The Journal of Korean Ancient History*, 98, 9-46.
- Y. H. Jo, S. Hong, 2019, Application of three-dimensional scanning, haptic modelling, and printing technologies for restoring damaged artifacts. *Journal of Conservation Science*, 35, 71-80.