



International

*Innovation in Knowledge Based and Intelligent
Engineering Systems*



INVITED SESSION SUMMARY

Title of Session: Digital Architecture and Economics for Internet of Things, Big data, Cloud and Mobile IT in Healthcare

Name of Chair:

Yoshimasa Masuda, Keio, Tokyo University of Science, Japan / California State University, USA
Rashmi Jain, Montclair State University, USA
Donald S. Shepard, Brandeis University, USA
Sebastian, University of Twente, Netherland
Shuichiro Yamamoto, Nagoya University, Japan

Details of Session:

Digital healthcare is a growing field with promising economic potential. To best realize this potential, it is important to consider the digital architecture linking many of its key components. These include the internet of things, artificial intelligence (AI), big data, cloud/mobile, and incentives to patients and organizations to improve services. These contribute to benefits to the society and efficiencies and/or profit to the organizations. The purpose of this invited session is to share promising trends, innovative ideas, new methods in digital architecture, recent economic analysis and advanced research results in digital healthcare fields.

List of topics of interest

- healthcare innovation
- data platforms in healthcare (electronic healthcare records, electronic medical records, data standards)
- predictive analytics on cloud and mobile IT platforms covering artificial intelligence (AI)
- healthcare management on cloud and mobile IT platforms
- healthcare economic analysis in digital healthcare
- internet of things in healthcare
- medical internet of things, medical system management and governance
- big data in healthcare covering AI (clinical decision support systems, etc.)
- data platform management for digital healthcare and transformation
- application portfolio management with digital healthcare
- telehealth, computerized physician order entry
- healthcare service delivery on digital platforms
- telemedicine, digital pharmacy
- healthcare robotics
- human computing interaction (HCI) Artificial Intelligence (AI)
- generative Artificial Intelligence (AI) related digital healthcare
- agentic AI related digital healthcare
- robotics with digital platforms in healthcare
- technology enabled healthcare services
- digital healthcare architecture with Society 5.0, Industry 4.0
- design management in healthcare

Please submit your paper of 5 pages (as an idea paper) to 10 pages (as full paper)

<http://inmed-26.kesinternational.org/>

Important Dates and Deadlines

Submission of Papers: 20 Feb 2026
Notification of Acceptance: 3 March 2026

Upload Final Publication Files: 13 March 2026
Conference Sessions: 17 - 19 June 2026

Publication: Accepted papers will be published by Springer in a volume of the Book Series entitled:
“Smart Innovation, Systems and Technologies Series”

<https://www.springer.com/series/8767>

Website URL (if any):

Email & Contact Details:

yoshi_masuda@keio.jp (Yoshimasa Masuda, Keio University, Tokyo University of Science, Japan / California State University, USA)

jainra@montclair.edu (Montclair State University, USA)

shepard@brandeis.edu (Brandeis University, USA)

j.p.s.piest@utwente.nl (University of Twente, Netherland)

yamamotosui@is.nagoya-u.ac.jp (Shuichiro Yamamoto, Nagoya University)