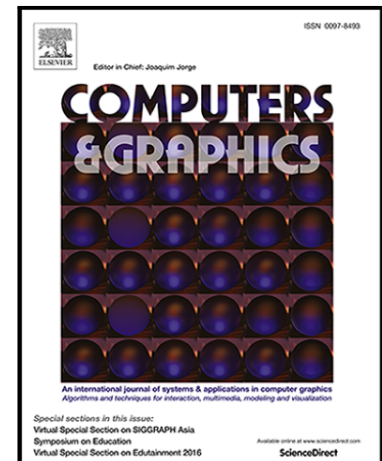


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Falcon: Visual Analysis of Large, Irregularly Sampled, and Multivariate Time Series Data in Additive Manufacturing

Chad A. Steed, William Halsey, Ryan Dehoff, Sean L. Yoder, Vicent Paquit, Sarah Powers

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- A scalable visual analytics system for finding temporal and statistical patterns at variable scales in large and complex time series data is proposed.
- A new segmented time series visualization technique is introduced that provides synchronized views of time series and imagery data with visual representations of information scent derived from time series similarity algorithms.
- The waterfall visualization technique, which gives an overview of time series data with details in miniature form, is introduced.
- A practical case study led by an additive manufacturing expert and involving real 3D printer log data is presented.
- Future improvements for this visual analytics system and reflections on this multidisciplinary project are discussed.

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