

Computer Science Seminar Series, 2011

National Capital Region

Spatiotemporal Thinking and Computing

Speaker: Prof. Chaowei Yang
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1:00PM-2:00PM, NVC 325

Abstract

Spatiotemporal principles played critical role in science discoveries and engineering developments ranging from Einstein's relative theory to the IBM's deep blue that can forecast tens to hundreds scenarios of future chess distribution on the chess board (therefore, beat the world chess champion). The discovery and utilization of the principles in our daily thinking would improve our intelligence to deal with different types of problems and questions. Integrating them with computing would help devise a next generation spatiotemporal computing. This presentation introduces the concept of *spatiotemporal thinking and computing* through a number of project examples. Future research and developments related to this topic are also discussed.

Biography

Chaowei Yang is Associate Professor at George Mason University, where he founded and co-directs the NASA/GMU Joint Center for Intelligent Spatial Computing (CISC). His research interest is on utilizing spatiotemporal principles to optimize computing infrastructure to support science discoveries. He acted as the chief architect of NASA Spatial Cloud Computing at GSFC (4.2010-6.2011) and serves as the chief architect for NASA Climate@Home. He has been funded with over 30 projects by NASA, NSF, FGDC, EPA, NPS, UCAR, and other agencies/companies. He published 90+ papers. He guested edited several journal issues about computing and geospatial, and is associate editor for GeoInformatica. He can be reached at cyang3@gmu.edu or 7039934742.