Stanford

Somalee Datta

Rsch Technical Mgr 3, Technology & Digital Solutions

Bio

BIO

I am a computational physicist by training and a biotechnologist by profession. I love system thinking approaches and complex problems. I have enjoyed working in a number of areas including research using healthcare data, genomics including development of clinical services, commercial products and sequencing devices, novel drug design and dedicated ASIC/hardware development.

CURRENT ROLE AT STANFORD

I am part of the Research Technology Team at Technology & Digital Solutions (TDS). I support research at Stanford Medicine. I joined Stanford in Oct 2012. Past experiences include Director of Bioinformatics at Stanford Center for Genomics and Personalized Medicine (SCGPM), and Director of Research IT at IRT/TDS.

EDUCATION AND CERTIFICATIONS

- PhD, Boston University, MA, USA , Computational Physics (non-equilibrium statistical mechanics) (2000)
- MSc, Indian Institute of Technology, Madras (aka Chennai), India , Physics (stochastic systems) (1994)
- BSc, Jadavpur University, Calcutta (aka Kolkata), India , Physics (1992)

Publications

PUBLICATIONS

- **Developing a Research Center for Artificial Intelligence in Medicine.** *Mayo Clinic proceedings. Digital health*
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- **Arrhythmias Other Than Atrial Fibrillation in Those With an Irregular Pulse Detected With a Smartwatch: Findings From the Apple Heart Study.** *Circulation. Arrhythmia and electrophysiology*
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- **SciReader: A Cloud-based Recommender System for Biomedical Literature**
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- **Cloud-based interactive analytics for terabytes of genomic variants data.** *Bioinformatics (Oxford, England)*
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- **Digital Health: Tracking Physiomes and Activity Using Wearable Biosensors Reveals Useful Health-Related Information.** *PLoS biology*
  Li, X., Dunn, J., Salins, D., Zhou, G., Zhou, W., Schüssler-Fiorenza Rose, S. M., Perelman, D., Colbert, E., Runge, R., Rego, S., Sonecha, R., Datta, S., McLaughlin, et al
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- **Cloud-based Interactive Analytics for Terabytes of Genomic Variants Data** *Bioinformatics*
  Pan, C., McInnes, G., Deflaux, N., Snyder, M. P., Bingham, J., Datta, S., Tsao, P. S.
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- **Secure cloud computing for genomic data** *Nature Biotechnology*
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- **Sequence to Medical Phenotypes: A Framework for Interpretation of Human Whole Genome DNA Sequence Data.** *PLoS genetics*
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- **The Integrative Human Microbiome Project: Dynamic Analysis of Microbiome-Host Omics Profiles during Periods of Human Health and Disease** *CELL HOST & MICROBE*
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