CURRICULUM VITAE **KARTHIK SRINIVASAN**
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Research Interests

Machine learning interpretability, health analytics, accounting analytics, statistical machine learning.

Academic Appointment

School of Business, University of Kansas, Lawrence, Kansas
Assistant Professor - Business Analytics Aug 2019 -

Education

Eller College of Management, University of Arizona, Tucson, US
PhD(Major: MIS, Minor: Statistics) Aug 2014 - May 2019

Indian Institute of Science, Bangalore, India
Master of Management(Major: Business Analytics) Aug 2011 - July 2013

Mumbai University, Mumbai, India
Bachelor of Engineering(Major: Electronics & Telecom.) June 2005 - July 2009

Refereed Journals

Kong S.H., Ahn D., Kim B., Kim J.H., **Srinivasan K.**, et al. 2020. "A Novel Fracture Prediction Model Using Machine Learning in Community-Based Cohort", *Journal of Bone and Mineral Research (IF:6.28)*.

Razjouyan J., Lee H., Nyugen H., Lindberg C., **Srinivasan K.**, et al. 2019. "Wellbuilt for wellbeing: Why controlling relative humidity matters for our health?", *Indoor Air (IF:2.55)*.

Srinivasan K., Currim F., Ram S. 2018. "Predicting high cost patients at point of admission using network science", *Journal of Biomedical Health Informatics (IF:3.85)*.

Lindberg C., **Srinivasan K.**, et al. 2018. "Effects of office workstation type on physical activity and stress", *Occupational and Environmental Medicine (IF:3.27)*.

Ghahramani A., Pantelic J., Lindberg C., Mehl M., **Srinivasan K.**, et al. 2018. "Learning occupants' workplace interactions from wearable and stationary ambient sensing systems", *Applied Energy (IF:5.61)*.

Non-peer Reviewed Publications

Jiang J., **Srinivasan K.** 2021 "Comparing Pregnancy and Childbirth-Related Hospital Visits in Arizona Before and During COVID-19 Using Network Analysis.", *SSRN*.

Lee H., Razjouyan J., Nyugen H., Lindberg C., **Srinivasan K.**, et al. 2018 "Sensor-based sleep quality index (SB-SQI): a new metric to examine the association of office workstation type on stress and sleep", *preprint*.

Manuscripts Under Review

Srinivasan K., Currim F., Ram S. "A Method For Analyzing Incomplete Data with Blockwise Missing Patterns – With An Application To Modeling Individual Risks Of Contracting COVID-19", under review with *Informs Journal of Data Science*.

Srinivasan K., Currim F., Ram S. et al. "Explainable Wearable Analytics for Exploring Wellbeing in the Workplace", under review with *Journal of Association for Information Systems*.

Kim B., **Srinivasan K.**, Ram S. "Paper title is masked as per journal policy", under second round of review with *MIS Quarterly*.

Rao S., **Srinivasan K.**, "Sustainability Reporting Textual Disclosure And Its Impact On Firm Value", under review with *Management Science*.

Agusto, F. B., Numfor, E., **Srinivasan, K.**, et.al. 2021. "Impact of Public Sentiments on the Transmission of COVID-19 across a Geographical Gradient", under review with peerJ.

Working Papers

Kim B., **Srinivasan K.**, Ram S. "Explainable Collaborative Filtering For Predicting Post-admission Conditions In Intensive Care Units", to be submitted to *Information Systems Research*.

Jiang J., **Srinivasan K.** "Graph Analytics for Analyzing U.S. Hospital Discharge Reporting During the COVID-19 Pandemic", to be submitted to *Journal of Business Analytics*.

Work in Progress

"Improving fidelity of local explanations with data augmentation", with Joe Nordling.

"Model-agnostic robust local explanations for continuous data", with Buomsoo Kim and Sudha Ram.

"Early signals from social media interactions for modeling stock market shocks during COVID-19", with Michael Lash, Shaobo Li, and Xiaorui Zhu.

"Do corporate opportunity waivers impact firm performance? An empirical analysis", with Nate Lundstrom and Roy Schmardebeck.

Refereed Workshop/Conference Proceedings

Srinivasan K., Jiang J. "Capturing Enduring Effects of the COVID-19 Pandemic on Hospital Visits in U.S. Using Graph Modeling",*Health Information Technology Symposium (HITS) - AIS SIG-Health Sponsored pre-ICIS Workshop, Dec 2021.*

Kim B., **Srinivasan K.**, Ram S. "Healthcare Predictive Analytics Framework for Short-term Multiple Disease Prediction in Critical Care",*INFORMS Workshop on Data Science, Nov 2021.*

Kim B., **Srinivasan K.**, Ram S. "Robust Local Explanations for Healthcare Predictive Analytics: An Application to Fragility Fracture Risk Modeling",*International Conference on Information Systems, Dec 2019.*

Srinivasan K., Currim F., Ram S. et al. "Using digital health wearable devices to understand the relationship between sound levels and wellbeing: A segmented mixed-effects regression approach", *Proceedings of the 17th Annual Workshop on Information Technology, Dec 2017.*

Srinivasan K., Currim F., Ram S. et al. "A regularization approach for identifying cumulative lagged effects in smart health applications", *Proceedings of the 7th International Conference on Digital Health*, pp 99-103, ACM, Jul 2017.

Srinivasan K., Currim F., Ram S. et al. "Feature importance and prediction modeling for multi-source healthcare data with missing values", *Proceedings of the 6th International Conference on Digital Health*, ACM, Apr 2016. **(Best paper award)**

Srinivasan K., Ram S. "Indoor environmental effects on individual wellbeing", *Proceedings of the 6th International Conference on Digital Health*, Apr 2016. (Extended Abstract)

Raturi V., **Srinivasan K.**, Narulkar G., Chandrashekharaiah A., and Gupta A. "Analyzing inter-modal competition between high speed rail and conventional transport systems: A game theoretic approach", *Proceedings of the 2nd Conference of Transportation Research Group of India*, Dec 2013.

Invited Talks and Presentations

- Local model agnostic explanations for healthcare analytics, DataLab, LakeHead University, Thunderbay, Canada (Sep 2021).
- Explainable Machine Learning at a Local Level: An Application in Fragility Fracture Risk Modeling, Veterans Affairs Medical Center, Kansas City (June 2021).
- Explainable AI for business, Plenary speech for Conference on impact of AI on business and society, organized by Loyola institute of business administration, Chennai, India, (Feb 2021).
- Rao S., **Srinivasan K.** "The Evolution of Sustainability Reporting Textual Disclosure: Evidence from the Largest US Corporations",*American Accounting Association International Accounting Section Mid-year meeting Jan 2021.*
- A novel method for developing local model-agnostic explanations, Indian Institute of Technology - Madras (IIT-M), Chennai, India, (Oct 2020).
- Interpretable Machine Learning using local model-agnostic explanations, Center for Business Analytics Research, University of Kansas, Lawrence (Jan 2020).
- Predicting high cost patients at point of admission using network science, AAG Weekly Sharing, DST Systems, Kansas City (Nov 2018).
- Predicting high cost patients at point of admission using network science, INFORMS Annual Meeting, Phoenix (Nov 2018).
- Determining the Effects of Sound Levels on Physiological Wellbeing in the Workplace: A Field Study Using Wearable Devices, Eller College of Management Friday Seminars, University of Arizona (Oct 2018).

- Instructor for two-day workshop on topics in data science, hadoop, and programming for data science, University of Arizona, Tucson (Sep 2018).
- Predicting high cost patients at point of admission using network science, Eller College Doctoral Student Workshop, University of Arizona, Tucson (Apr 2018).
- Using digital health wearable devices to understand the relationship between sound levels and wellbeing: A segmented mixed-effects regression approach, Workshop on Information Technology, Seoul (Dec 2017).
- A regularization approach for identifying cumulative lagged effects in smart health applications, International Conference on Digital Health, London (Jul 2017).
- Knowledge discovery using disease comorbidity networks, INFORMS Annual Meeting, Nashville (Nov 2016).
- Feature importance and prediction modeling for multi-source healthcare data with missing values, International Conference on Digital Health, Montreal (Mar 2016).
- Data analysis with R *(one day workshop)*, Management Information Systems Graduate Association, University of Arizona, Tucson (Feb 2016).
- Data science and technical social networking *(invited talk)*, K J Somaiya College of Engineering, Mumbai (Jul 2015).

White papers

Ram S., **Srinivasan K.**, Chagarlamudi S. "Analysis of chronic disease related patient visits in Arizona hospitals", *Making Action Possible dashboard report, Nov 2018*.

Srinivasan K., Iyer P., Kumar A., and Joshi A. "Manufacturing Process Optimization using Statistical Methodologies", *Technical report, Feb 2012.*

Selected Media Coverage of Research

- *Workers in open-plan offices more active*, BBC (Aug 2018).
- *Staff in open plan offices are fitter and less stressed*, The Guardian (Aug 2018).
- *Open plan offices could make workers fitter*, The Telegraph (Aug 2018).

Certificates

Certificate in College Teaching (10-unit program) Jan 2018 - Dec 2018
Office of Instruction and assessment, University of Arizona

Teaching Experience

Instructor - University of Kansas

BSAN 726 - Data Management and Warehousing Fall 2020
Number of students: 23
Overall instructor/course rating: 4.53/5.0

BSAN/IST 326 - Database Management Systems Fall 2020
Number of students: 110

Overall instructor/course rating: 4.8/5.0

BSAN/IST 325 - Systems Analysis and Design Fall 2019
Number of students: 49
Overall instructor/course rating: 4.4/5.0

BSAN/IST 326 - Database Management Systems - Batch 1 Fall 2019
Number of students: 54
Overall instructor/course rating: 4.2/5.0

BSAN/IST 326 - Database Management Systems - Batch 2 Fall 2019
Number of students: 55
Overall instructor/course rating: 4.6/5.0

Guest Instructor - KU Analytics Certificate Program for Working Executives

SQL - 6 sessions Spring 2020

Business Intelligence - 2 sessions Spring 2020

Instructor - University of Arizona

MIS 331 - Database Management Systems Fall 2017
Number of students: 59
Overall teaching effectiveness: 3.8/5.0

MIS 111 - Computers and Inter-networked Society Summer II 2016
Number of students: 17
Overall teaching effectiveness: 4.7/5.0

Teaching assistant - University of Arizona

MIS 587 - Business Intelligence (Online)
Spring 2016, Fall 2016, Spring 2017, Spring 2018, Fall 2018, Spring 2019

Academic honors

- Best paper award in INFORMS Workshop on Data Science (2021).
- Best reviewer award for IS in Healthcare track in International Conference on Information Systems (2020).
- James F. LaSalle Teaching Excellence Award for exemplary student instructor (2017).
- Best paper award in 6th International Conference on Digital Health (2016).

Grants

- New Faculty Research Development (NFRD) grant from KU Office of Research (2021).
- Arizona Making Action Possible Dashboard (AZMAP) white paper grant (2017).

- Eller Small Grant Research data grant (2016).
- Graduate and Professional Students Council (GPSC) research travel grants (2015-2018).

Service

- Faculty Mentor: Analytics and Information Systems Student Club - University of Kansas 2021.
- Faculty Mentor: Blockchain Institute - University of Kansas 2021.
- Faculty Mentor: Association of Indian Students - University of Kansas 2021.
- Program committee member: AAAI Joint International Workshop on Health Intelligence 2020-2022.
- Program committee member: International Conference on Artificial Intelligence in Medicine (AIME) 2020-2022.
- Session Chair: 'Healthcare Analytics and Medical Decision-making' at INFORMS Annual Meeting 2018.
- Manuscript reviewer: Information Systems Research (ISR), IEEE Transactions on Data and Knowledge Engineering (TKDE), Journal of the Association for Information Systems (JAIS), Journal on Data Semantics (JODS), Journal of Business Analytics (JBA), Transaction on Management Information Systems (TMIS), Business and Information Systems Engineering (BISE), BMJ Open.
- Conference reviewer: Pacific Asia Conference on Information Systems (PACIS) 2020-21, International Conference on Information Systems (ICIS) 2019-21, European Conference on Information Systems (ECIS) 2018.

Professional memberships

Association for the Advancement of Artificial Intelligence (AAAI), Association for Information Systems (AIS), Association for Computing Machinery (ACM), Institute for Operations Research and the Management Sciences (INFORMS).

Industry Work Experience

- Robert Bosch Ltd., India
  Data Modeler and Analyst — Jan 2013-July 2014
- Accenture Ltd., India
  Software Developer — Dec 2009-July 2011
- ICICI Bank, India Intern - Business Intelligence — May 2012-Jun 2012
- Bhabha Atomic Research Center, India
  Intern - Microwave Engineering — Jun 2008-Jun 2009

References

Jide Wintoki — E-mail: jwintoki@ku.edu
Interim Associate Dean for Graduate Programs,
Area Director - Analytics, Information, and Operations Management
School of Business, University of Kansas

Sudha Ram E-mail: ram@eller.arizona.edu
Anheuser-Busch Chair in MIS, Entrepreneurship and Innovation
Director - INSITE Center for Business Intelligence and Analytics
Department of Management Information Systems
Eller College of Management, University of Arizona

Susan Brown E-mail: suebrown@eller.arizona.edu
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