#### KARTHIK SRINIVASAN karthiks@ku.edu

Healthcare information systems, digital health, statistical machine learning, Research INTERESTS machine learning interpretability.

ACADEMIC School of Business, University of Kansas, Lawrence, Kansas APPOINTMENT 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

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).

Manuscripts Lee H., Razjouyan J., Nyugen H., Lindberg C., Srinivasan K., et al. "Sensor-Under Review based sleep quality index (SB-SQI): a new metric to examine the association of office workstation type on stress and sleep", under review with Sensors, Jul

> Razjouyan J., Lee H., Nyugen H., Lindberg C., Srinivasan K., et al. "Wellbuilt for wellbeing: Why controlling relative humidity matters for our health?", Revise and Resubmit to Indoor Air.

> Kong S.H., Ahn D., Kim B., Kim J.H., Srinivasan K., et al. "A Novel Fracture Prediction Model Using Machine Learning in Community-Based Cohort Study", under review with BONE.

#### Refereed Journals

2018.

#### 1 of 4

#### WORKING PAPERS

**Srinivasan K.**, Currim F., Ram S. et al. "Determining the effects of sound levels on physiological wellbeing at workplace An observational study using wearable devices", to be submitted to *Management Information Systems Quarterly*.

**Srinivasan K.**, Currim F., Ram S. "Analyzing incomplete data with blockwise missing patterns", to be submitted to *Journal of Management Information Systems*.

### WORK IN PROGRESS

"Fragility Fracture Risk Modeling using a deep learning approach."

"Robust Local Explanations for Fragility Fracture Risk Modeling."

"Determining factors contributing to success and failure in health startups."

## REFEREED CONFERENCE PROCEEDINGS

Kim B., **Srinivasan K.**, Ram S. "Robust Local Explanations for Healthcare Predictive Analytics: An Application to Fragility Fracture Risk Modeling", conditionally accepted at 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

- Predicting high cost patients at point of admission using network science, INFORMS Annual Meeting, Phoenix (Nov 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.

# 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 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

#### ACADEMIC HONORS

- James F. LaSalle Teaching Excellence Award for exemplary student instructor (2017).
- Best paper award in 6th International Conference on Digital Health (2016).

#### Grants

- 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).

#### ACADEMIC SERVICE

- Session Chair: INFORMS Annual Meeting 2018.
- Manuscript reviewer: 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), Business and Information Systems Engineering (BISE), BMJ Open, among others.
- Conference reviewer: International Conference on Information Systems (ICIS), European Conference on Information Systems (ECIS).

#### Professional Memberships

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

Sudha Ram (Faculty Advisor)

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

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McClelland Professor of MIS and Department Head Department of Management Information Systems Eller College of Management, University of Arizona