# Research profile (bird's-eye view)

KC Santosh, PhD, IEEE Senior Member

Associate Professor (Promoted and effective from SU 2020)

Graduate Program Director

Email: santosh.kc@ieee.org; Ph. +1(301)640-0921; Web: http://kc-santosh.org

## A. Research Expertise and Areas

- 1) Expertise: Artificial Intelligence, Machine Learning, Computer Vision, Signal Processing, Pattern Recognition, Data Mining, Information Retrieval, and Big Data
- 2) *Areas:* Healthcare, Medical informatics, Biometrics, Speech/Audio Processing, Forensics, Document Analysis, Handwriting Recognition, Satellite Imaging, Robotics, and Internet Of Things.

# B. Research Experience

- 1) Research Scientist/Fellow: 2+ years (National Institutes of Health (NIH))
- 2) Post-Doc research scientist: 2+ years (LORIA)
- 3) Terminal Degree: PhD in Computer Science (2011), Pattern Recognition, Machine Learning, and Artificial Intelligence

#### C. Publications

Total = 154 research papers + 4 books, Cumulative Impact Factor = 115+:

- 1) Books (authored/edited): 4 (authored = 2; and edited/partially authored = 2)
- 2) Journal articles (peer-reviewed): 66 (plus 9 are under review)
- 3) Conference proceedings (peer-reviewed): 81 (plus 12+ are under review)
- 4) Book chapters: 7
- 5) Research talks (invited talks & keynote addresses): 42 (additional 4 are confirmed for Fall 2019)

#### D. Research impact

Total citations = 1500, h-index = 23, and i-10 = 48 (source: Google Scholar, April 01, 2020)

#### E. Awards (Research)

- 1) The President's Award for Research Excellence (New/Mid-Career Faculty), USD (2019)
- 2) Professor of the Game (two times in a row): Certificate of Recognition (Academic Achievement), Academic Affairs, USD (2019 and 2020)
- 3) US Department of Health and Human Services (HHS) Ignite Award (2014)

#### F. Research thesis advising (and publications)

- 1) PhD thesis: Co-advisor =  $\frac{2}{3}$ ; External examiner =  $\frac{6}{3}$ ; and Committee member =  $\frac{1}{3}$
- 2) MS/MA thesis: Advisor = 9 and Committee member = 10
- 3) *Honors thesis:* Committee member = 2
- 4) Publications with students (USD): 10 (peer-reviewed) and 18 (abstract-only).

## G. Grantsmanships

- 1) External grants: IEEE Computer Society = 1 (PI); SDCRGP = 1 (collaborator); Gov. sub-way grant = 1 (collaborator); Department of Education (DOE) = 1 (Director, Robotics); NSF-NRT = 1 (Supervisor, Forensics); NSF-N3 = 1 (Supervisor, Healthcare); Asian Office of Aerospace Research and Development (AOARD) = 1 (co-PI, under review); and NSF = 2 (co-PI and Senior scientist, under review)
- 2) Local/university grants: 9

# H. Services (professional)

- 1) Editor-In-Chief: 1 journal
- 2) Associate editor: 5 journals
- 3) Guest editor: 10 journals
- 4) Editorial board: 11 journals
- 5) Conference chair (general chair, 2 and program chair, 10): 12
- 6) *Conference organizer:* **5** (international)
- 7) Proceedings editor: 4, Springer Nature
- 8) Program committee (conferences): 20
- 9) Grant review panelist: a) NSF, b) NSERC (Canada), c) Mitacs (Canada), and d) Medical Research Council (MRC, UK)
- 10) IEEE Computer Society Chair (region 4)

## I. Professional membership

- 1) IEEE Senior Member, Since 2018
- 2) IEEE Computer Society
- 3) Association for Computing Machinery

### J. Collaborations (continent-wise)

- 1) North America: National Institutes of Health (NIH), Mayo Clinic Center (Rochester), Minnesota State University, University of North Dakota, Central Washington State University, University of Maryland, East Carolina University, University of California Los Angeles, Ohio State University, Depaul University (Chicago), University of Chicago Medicine, and Wichita State University (just to name primary ones).
- 2) *Europe:* a) France: Universite de Paris Descartes, Universite de Lorraine, INRIA Nancy Grand Est Research Center, ITESOFT, Universite Clermont Auvergne, Universite de La Rochelle; b) Sweden: Halmstad University; c) Malta: University of Malta; d) Spain: Universit de Autonoma; e) Italy: Universidade de Roma; and f) UK: University of Essex, University of Reading
- 3) Asia: a) Malaysia: Taylors University; b) India: Indian Statistical Institute (ISI) Kolkata, West Bengal State University, Jadavpur University, Aliah University, Indian Institute of Technology (IIT) Roorkee, MGMs college of Health Sciences, Mumbai, MGMs college of Computer Science and Engineering; and c) Nepal: Pokhara University, Tribhuwan University.

**Note:** For detailed information, a complete CV is provided. Further, more detailed information can be found at http://kc-santosh.org.