# Pramod Anantharam

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## RESEARCH INTERESTS

- Semantic Web Information Extraction BOSCH RTC | RESEARCH INTERN
- Probabilistic Graphical Models
- Data Science for Social Good.

# **EDUCATION**

#### KNO.E.SIS

WRIGHT STATE UNIVERSITY PhD in Computer Science Expected April 2016 | Dayton, OH, USA

#### **VTU**

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

BE IN ELECTRICAL ENGINEERING June 2006 | Bangalore, Karnataka, India

# **PUBLICATIONS**

• Published in ACM TIST Journal, AAAI, SDM • 185+ citations • 2 awarded patents • Served on Program Committee for WWW, ISWC, IJCAI, ESWC, Hypertext, IEEE iThings

# COURSEWORK

Artificial Intelligence, Information Retrieval, Probability and Statistics for Engineers, Programming Languages, Computational Complexity, Algorithm Design, Semantic Web, Communications in Science, Machine Learning (Coursera), Statistical Learning (Stanford Online), Probabilistic Graphical Models (Coursera)

# SKILLS

Machine Learning: Bayesian Networks, Conditional Random Field, Linear Dynamical Systems, Markov Decision Process, Hidden Markov Models, Linear Regression, Logistic Regression, Decision Trees, Random Forest, Support Vector Machine. Neural Networks. Ensemble Methods:

Databases: MySQL, Virtouso, Jena, Neo4j; Languages: Programming: Java, Python, R, Matlab, Shell, PHP, Scheme, Java Script, Knowledge Representation: RDF, RDFS, OWL

Google Scholar LinkedIn, Twitter, G+

### **EXPERIENCE**

• Predictive Analytics • Machine Learning May 2014 - Aug 2014 | Pittsburgh, PA

- Task recommendation for DIY (Do-It-Yourself) tasks in Internet of Things and Services (IoTS) Environment.
- Contributed to creating a language to represent, reason, and recommend tasks.
- Created a Markov Decision Process based recommendation engine.

### **UNIVERSITY OF SURREY** | VISITING DOCTORAL STUDENT

Sep 2013 - Dec 2013 | Guildford, United Kingdom

- Worked on extracted city traffic related events from twitter.
- Proposed and implemented algorithms for extraction of city traffic events and published this work in ACM TIST Journal.

#### IBM RESEARCH | RESEARCH INTERN

May 2012 - Sep 2012 | Delhi, India

- Worked on extracting and assessing impact of city traffic events on the schedule of public transport vehicles for event aware route recommendation.
- Proposed and implemented algorithms for extracting city traffic events from SMS messages and integrated it with a journey planner.
- Best research showcase award (one of 3 awards for 40 interns).

#### **IBM RESEARCH** | RESEARCH INTERN

May 2011 - Sep 2011 | Delhi, India

• Worked on dynamic ontology evolution of a Smart City ontology.

# RESEARCH

#### TRAFFIC ANALYTICS | GRADUATE RESEARCH ASSISTANT

Jan 2012 - Present | Kno.e.sis

Information Extraction to extact city events from social stream such as twitter, Machine Learning techniques for modeling time series dynamics, Anomaly detection.

#### K-HEALTH FOR ASTHMA | GRADUATE RESEARCH ASSISTANT

Dec 2012 - Present | Kno.e.sis

Probabilistic risk assessment model for reducing asthma attacks using active and passive sensing of physiological, physical, and environmental observations.

#### **SEMANTIC SENSOR WEB | GRADUATE RESEARCH ASSISTANT**

Jan 2009 - Dec 2011 | Kno.e.sis

Modeling trustworthiness of sensor nodes using Bayesian approaches.

# AWARDS AND RECOGNITION

- Selected to participate in the NSF-funded Data Science Workshop 2015
- 2015 Our ACM TIST paper was a featured and 5th most downloaded article
- 2014 Offered Eric & Wendy Schmidt Data Science for Social Good Fellowship
- 2013 A short article on my research appeared on our university newsroom
- 2013 Invited to Dagstuhl Seminar on Physical-Cyber-Social Computing
- 2013 Invited to talk on Data Analytics for IoT at University of Debrecen
- 2012 Best research showcase award at IBM Research, India

# SOCIFTIES

2013 SIAM (Society for Industrial and Applied Mathematics)