Abhishek Bhatia

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EDUCATION

Columbia University: Master of Science in Computer Science

New York, NY, USA
Jan 2017 – May 2018

University School of Information, Communication and Technology: Bachelor of Technology in Information Technology

New Delhi, India
Aug 2011 – June 2015

- Thesis: A Hybrid Autonomic Computing-Based Approach to Distributed Constraint Satisfaction Problems. [Link] CPI: 75.35/100

RESEARCH EXPERIENCE

Indian Institute of Technology(IIT), Delhi: *Project Assistant under Dr. Jayadeva*

Delhi, India
Jan - Nov 2016

- Developed an ant-colony algorithm namely Eigen-ant for game playing.
- Developed low complexity classification framework for EEG signals which achieved lower error rates compared to previous approaches such as SVMs. The proposed methodology learns simpler representations which is illustrated by the lower number of support vectors used.
- Worked on audio-compression with the help of sparse-autoencoders. The code was written in tensorflow and theano.

Indraprastha Institute of Information Technology(IIIT), Delhi: *Research Assistant under Dr. Sachit Butail*

Delhi, India
Jun - Dec 2015

- Built a kinematic model to explain how emotional intensity and organization in human crowds affects the spread of panic. The study provided new insights into how certain psychologies are more prone to specific triggers in crowd disasters.
- Developed a dynamical model to simulate changes of perceptual vision field in human crowds. Conducted 10 experimental trials with over 200 participants by giving each individual one of the two specific instructed behaviors to exit the room.

Delhi, India
Mar – Jun 2014

University School of Biotechnology: *Research Intern under Dr. Raghuram*

- Subjected the whole transcriptome microarray data from a natural knockout mutant to pathway and motif analysis. The aim was to understand genome wide role of G-protein (alpha subunit) in plants.
- The results suggested that at least 64 KEGG pathways were affected and the extensive role(s) for the only known G-protein (alpha subunit gene) in rice was confirmed.

PUBLICATIONS

- Sharma, I., Chourasia, B., Bhatia, A. and Goyal, R., 2016. On the role of evangelism in consensus formation: a simulation approach. *Complex Adaptive Systems Modeling*, *4*(1), p.16. [Link]
- Bhatia A, Singh A, Goyal R. A Hybrid Autonomic Computing-Based Approach to Distributed Constraint Satisfaction Problems. *Computers*. 2015;4(1):2-23. [Link]
- Singh A, Thapar S, Bhatia A, Singh S, Goyal R. Disk Scheduling using a Customized Discrete Firefly Algorithm. *Cogent Eng*. 2015;2(1):1011929. [Link]
- Bhatia A, Johari R. Genetically optimized ACO inspired PSO algorithm for DTNs. In: *3rd International Conference Reliability, Infocom Technologies and Optimization (ICRITO)*. 2014:1-6. [Link]
- Bhatia A, Singh D, Gyan Deep, P. Jangam Annie, R. Pathak Ravi and Raghuram N. Pathway and Motif Analysis of G-protein (α subunit) Regulated Genes in Rice. In: *Advances in Stem Cell Research 2014, SelectBio*. [Link]

TECHNICAL SKILLS

Languages: Java, C++, C, NetLogo, Matlab, R, Python, Shell scripting.
Libraries :Django, Flask, Twisted, TensorFlow, Keras.