# **Curriculum Vitae**

#### Dr. Akshansh Gupta

School of Computational Integrative Sciences Jawaharlal Nehru University New Delhi- 110067 Contact no: - +91 9013927309 Email <u>ID-akshanshgupt@jnu.ac.in</u>, <u>akshanshgupta83@gmail.com</u> <u>Skype ID: akshanshgupta83</u>

## **Personal Information**

Disability -Cerebral Palsy (Orthopedic) Sex: Male D.O.B.- 23-02-1983 Nationality: Indian Marital Status: Single

## Permanent Address -

S/O Sri Amarnath Gupta Street: Dharnidharpur Locality: Aahiyapur P.O.: Sadar Bazar Jaunpur, Uttar Pradesh- -222001

**Current Status:** Post-Doctoral fellow (as **principle investigator**) under the scheme of **Cognitive Science Research Initiative** (CSRI) from the *Department of Science and Technology (DST), Ministry of Science and Technology, Government of India,* with project entitled "Identification of EEG signature for different mental states in School of Computational Integrative and Science, Jawaharlal Nehru University, New Delhi.

**Event Organized:** Symposium on Applications of Pattern Recognition & Machine Learning in Medical Science on Dated 18<sup>th</sup> September 2017, at Jawaharlal Nehru University, New Delhi-110067.

**Work Done:** As a Research Assistant at School of Computational Integrative and Science, Jawaharlal Nehru University, New Delhi.

#### **Reference:**

- Prof R.K Agrawal (SC & SS, JNU New Delhi India 110067), e-mail: <u>rkajnu@gmail.com</u>, contact: 9810115033.
- Prof S. J. Minz (SC & SS, JNU New Delhi India 110067), e-mail: <u>sona.minz@gmail.com</u>, contact: 9868807594.
- Prof Karmeshu (SC & SS, JNU New Delhi India 110067), e-mail:

karmeshu@mail.jnu.ac.in, contact: 9968284874.

- Prof Anirban Chakraboti (SC & IS, JNU New Delhi India 110067), e-mail: <u>anirban.chakraborti@gmail.com</u> contact: 9560812499
- Dr. Kalpana Bhargava (DIPAS Lab, DRDO, New Delhi, India), e-mail: <u>kalpanab2006@gmail.com</u> contact: 9899198336.

## **Career Statement**

- Wish to develop a system which helps physically challenge person to operate computer by using links between natural neurons to artificial neurons.
- My PhD is multidisciplinary in nature and comes under innovative area of research.

# **Area of Interest**

- Pattern Classification
- Data Mining

# **Educational Qualification**

- Certificate in "*Data Scientist Toolbox*" course offered by Johns Hopkin University through online portal **Coursera**,
- Ph.D. in "Performance Enhancement of Mental Task Classification: A Study of Combination of Feature Extraction and Selection Methods" under the supervision of Prof R K Agrawal from SC&SS, JNU, New Delhi,
- M. Tech [7.32 CGPA] (2010) in "Performance Evaluation of Classifiers using Feature Extraction with Burg's Method for Mental Task Classification" SC&SS, New Delhi ,India.
- B. Tech [62.09%] (2006) in Computer Science & Engineering from V.B.S. Purvanchal University, Jaunpur, U.P. India
- Intermediate [56.6%] (2000) from Nagar Palika Inter College, Jaunpur, UPHSB, ALLAHABAD.
- 10<sup>th</sup> Board [65.3%] (1998) from Nagar Palika Inter College, Jaunpur, UPHSB, ALLAHABAD.

# Achievements:

- Got Senior Research Fellowship (SRF) from Council of Scientific and Industrial Research(CSIR), India, 2012
- Got National Eligibility Test (NET) Certificate for teaching in Computer Science from University Grant Commission (UGC) India, Year: June, 2012 Roll Number: 17870555, Electronic Certificate Number : 121055011
- Got Student Travel Award from one of the most prestigious conference in the field of Data Mining, The 16<sup>th</sup> Pacific-Asia Conference on Knowledge discovery and Data Mining (PAKDD 2012) Malaysia.
- Certificate in Core Java from **NIIT** Lucknow U.P.
- Certificate in VB NET from MARG INFOZEN SOFWARE SOLUTION Lucknow U.P.

# **Research Publications**

#### Conference:

- Akshansh Gupta and R. K, Agrawal Relevant Feature Selection from EEG Signal for Mental Task Classification, P N Tan et.al. (Eds): PAKKD 2012, Part II, LNAI 7302, pp. 431-442, 2012. @Springer-Verlag Berlin Heidenberg 2012 [The 16<sup>th</sup> Pacific-Asia Conference on Knowledge discovery and Data Mining, Malaysia PAKDD 2012] ISSN/ISBN: 978-3-642-30216-9
- 2. Akshansh Gupta, R. K. Agrawal and Baljeet Kaur *A three phase approach for mental task classification using EEG* in ICACCI '12, August 03 05 2012, CHENNAI, India, ACM 978-1-4503-1196, pp-896-904, ISSN/ISBN: 978-1-4503-1196-0
- 3. Akshansh Gupta and Jyoti Singh Kirar "*A Novel Parametric Feature Extraction Approach for Mental Task Classification*". 2015 Intl. Conference on Computing and Network Communications (CoCoNet'15), Dec. 16-19, 2015, Trivandrum, India. IEEE Xplore, *pp*- 841-844

## Journal:

- 1. Akshansh Gupta, R. K. Agrawal and Baljeet Kaur *Performance enhancement of mental task classification using EEG Signal: a study of multivariate feature selection method* Soft Computing Journal, 19(10), 2015,2799-2812, ISBN- 1433-7479
- 2. Akshansh Gupta and Dhirendra Kumar: *Fuzzy clustering-based feature extraction method for mental task classification, Brain Informatics*, 2017,135-145, 4(2), ISBN 2198-4026
- 3. Amit Saxena, Mukesh Prasad, **Akshansh** Gupta, Neha Bharill, Om Prakash Patel, Aruna Tiwari, Meng Joo Er, Weiping Ding, and Chin-Teng Lin. "A Review of Clustering Techniques and Developments." *Neurocomputing*(2017), 267, 664-681 ISSN: 0925-2312

## Talk:

- 1. Akshansh Gupta "Distinguish of two different states human thought using soft computing approaches". Invited Talk in Bioinformatica Indica Conference in Kerala in Jan-2016.
- 2. Akshansh Gupta "Distinguish of two different states human thought using soft computing approaches". Invited Talk in National Science Day-2017, Jawaharlal Nehru University
- 3. Akshansh Gupta and Dhirendra Kumar: *Fuzzy clustering-based feature extraction method for mental task classification*, Contribution Talk in International Symposium on Computational Mathematics, Optimization, and Computational Intelligence (CMOCI 2017), IIT, Indore, India.
  - Communicated to Journal
- 1. Akshansh Gupta et al A Conjunction of Power Spectral and Multivariate Feature Selection Approach to Improve Mental Task Classification is communicated to peer review Journal
- 2. Akshansh Gupta et al Optimal Decision Tree Based Support Vector Machine For Multi-

Class Mental Task Classification, Revised manuscript submitted in IEEE Transactions on Cognitive and Developmental Systems

3. Akshansh Gupta, Dhirendra Kumar, Anirban Chakraborti, and Kiran Sharma: Performance Evaluation of Empirical Mode Decomposition Algorithms for Mental Task Classification. *doi: <u>http://dx.doi.org/10.1101/076646</u>* 

# Seminar Attended:

- International Conference on Methods and Models in Computer Science (ICM2CS-2009), School of Computer and Systems Sciences, Jawaharlal Nehru University, New Delhi-110067
- 2. International Conference on Big Data Analytic (BDA-2012), Department of Computer Science, University of Delhi
- 3. International Conference on Big Data Analytic (BDA-2014), Indian Institute of Technology, Delhi
- 4. National Science Day, 2015, Jawaharlal Nehru University, New Delhi-110067
- 5. National Science Day, 2017, Jawaharlal Nehru University, New Delhi-110067
- 6. Bioinformatica, Indica,2016, Department of Computational Biology and Bioinformatics, University of Kerala, Thiruvananthapuram, Keralam, India
- Continuing Education Program (CEP) on Brain Science & Technology : Tool and Techniques to Understand the Human Brain, Neurocomputing Lab, Dept. of Electrical Engineering, IIT Delhi
- 8. International Symposium on Computational Mathematics, Optimization, and Computational Intelligence (CMOCI 2017), IIT, Indore, India.

## Subjects I can teach-

- Pattern Classification
- Data Mining
- Operating System
- Data Structure
- Database Management System
- Theoretical Computer Science
- Basic Discrete Mathematics

## **Computer Knowledge**

- **Programming Languages :** C, VB6.0, Core Java
- **Operating System:** Windows
- Technology : .Net, Matlab, R, Weka, SPSS, Python

# **Co-curricular Activities:**

- Actively participated in disability welfare activities in and outside JNU.
- Have worked as a mess secretary in Kaveri hostel in JNU, New Delhi in year 2010.
- Contested for the post of President in Student Union Election in JNU 2012.

# Strength:

Hardworking, Optimist & Disciplined