

Dr. Naveen Aggarwal

navagg@pu.ac.in

University Instt. of Engg &Tech.,
Panjab University, Sector 25,
Chandigarh-160014

H. #-3329, PEC Society,
Sector 49-D
Chandigarh-160047

Academic Qualification

Standard	Year	Board/Univ	Remarks
B.E. (Comp. Sc.)	2000	Punjab Tech. Univ.	1 st in College, 3 rd in University. Bronze medallist
M.Tech (Comp. Sc)	2002	IIT Kharagpur	2nd in the IIT
Ph.D	2011	GGs IP University, Delhi	

Work Experience

Institution	Designation	Year/Session	Class	Subjects
Univ. Instt. Of Engg. & Tech. Panjab Univ. Chandigarh	Assoc. Prof,	Oct 2015 to Till Date	B.E.(CSE) M.E (CSE)	AI, Business Intelligence & Data Mining
Univ. Instt. Of Engg. & Tech. Panjab Univ. Chandigarh	Asstt. Prof,	Feb 2005 to Oct 2015	B.E.(CSE) M.E (CSE)	Software Engg., AI, Digital Image Processing, Multimedia Computing, Data Warehousing & Data Mining
Punjab Engg. College, Chandigarh.	Lecturer	Feb 2002 to Feb2005	B.E. (CSE) & M.E. (IT)	Comp. Arch., DBMS, Object Oriented Modeling, Data Warehousing & Data Mining, AI, OS

Total Experience: 14 years +

Total Publications: 80

International Journals: 20, International Book chapters: 6, International Conferences: 30, National Conferences: 25

Books Published: 01 for GATE Entrance Exam Preparation by CENGAGE Publishers

Professional Membership

- Member IEEE (Membership No: **92663937**) & Member ACM (Membership No: **9053448**)
- Life Member of HEMSI
- Life Member of Computer Society of India & Life Member of CSTA
- Senior Member IJCSITA
- Senior Member of International Association of Computer Science and Information Technology

Awards & Honours:

- **Procurement coordinator and consultant** at State Project Facilitation Unit of UT Chandigarh for TEQIP-II project being implement in Technical institutes of Chandigarh (Total Amount = Rs 30 Crore). From Feb 2012 to Jan 2014.
- **Outstanding Faculty Contributor** award by Infosys Technologies Pvt. Ltd.
- Successfully Completed a Sabbatical project “**Tool based Estimation Model Development**” at Infosys Chandigarh in August 2006.
- Imparted training to more than 1000 personnel to use Electronic Voting machines during 2004 Lok Sabha Elections of Govt of India.
- CMS Effort Estimation Model is developed in collaboration with BirlaSoft Corp., India
- Appreciation letter from Dr. M.P. Ravindra, Vice President and head Education and Research Deptt, Infosys Technologies Ltd. for Sabattical project undertaken at Infosys technologies.
- Appreciation Letter from CEO, AXEDE Corp, USA for developing CMS Effort Estimation Model for their organization.
- Awarded Rs 10,000/- by Prof. R.C. Sobti to develop SMS based attendance management system in UIET.
- Awarded Bronze medal for standing third in graduation by Punjab Technical University.

Projects

S.No	Name of Project	Sponsoring Agency	Duration (Period)	Role	Amount Sanctioned
1.	Design Innovation Centre: Subtheme: Traffic Sensing & Information Technologies	MHRD	3 Years 2015-2018	Principle Investigator	Rs 10 Crores for full project
2.	CARTS: Communication Assisted Road Transport System	ITRA, Media Lab Asia (DEITY)	3 Years (2013-2015)	Principle Investigator	Total=1.28 Crores (RS 12.6 lacs for UIET)
3.	Armor Wire Tester	Oceaneering Pvt. Ltd.	1 Year (2016)	Joint Investigator	12 Lacs
4.	A tool based Effort Estimation Model	Infosys Technologies Ltd.	Six Months (June 2006- Decmber 2006)	Principle Investigator	1 Lacs
5.	SMS Based Result Information System	Panjab University	Six Months (January 2007- June 2007)	Principle Designer	10000
6.	Speaker Recognition and Identification for	MHRD under TEQIP-II	One Year (2013-2014)	Principle Investigator	1.20 lacs

	VoIP				
7.	Subjective Assessment of Video quality for validation of objective metrics	MHRD under TEQIP-II	One Year (2013-2014)	Principle Investigator	1.33 lacs
8.	TEQIP-II Implementation in various institutes at Chandigarh	World Bank through MHRD	Three Years 2012-2015	Consultant at State Project Facilitation Unit.	

Industrial projects Completed

1. Effort Estimation Model developed for Axede Corp USA in 2008.
2. Content Management System development for Infosys Technologies Ltd (Patents obtained by Infosys technologies Ltd.) in 2006.
3. Cost Effort Estimation tool for Birlasoft technologies. (Patent obtained by Birlasoft technologies) in 2008-09.

Selected Publication related to Intelligent Transportation Systems Only

1. Anuj Dimri, Harsimran Singh, Naveen Aggarwal, Bhaskaran Raman, Diyva Bansal, and K. K. Ramakrishnan, “**RoadSphygmo: Using Barometer for Traffic Congestion Detection**”, COMSNETS 2016.
2. Shubham Chaudhry, Tanjot Kaur, Naveen Aggarwal, Bhaskaran Raman, Diyva Bansal, and K. K. Ramakrishnan, “**Bus Boarding Event Detection using Smartphone Sensors**”, ITS Workshop (COMSNETS’16).
3. Megha Chaudhary, Aneesh Bansal, Gurdit Singh, Divya Bansal, Bhaskaran Raman, Naveen Aggarwal, K. K. Ramakrishnan, “**Finding Occupancy in Bus using Crowdsourced data from Smartphones**”, 17th International Conference on Distributed Computing and Networking (ICDCN) Singapore, January 4-7, 2016.
4. Anirudh Vemula, Nikhil Patil, Vivek Paharia, Aneesh Bansal, Megha Choudhury, Naveen Aggarwal, Divya Bansal, K. K. Ramakrishnan, Bhaskaran Raman, “**Improving Public Transportation Through Crowd-Sourcing**”, in proceedings of 7th International Conference on Communication and Networks (COMSNETS 2015), ITRA Workshop, Jan 6-10, 2015.
5. Ravi Bhandari, Megha Chaudhary, Aneesh Bansal, Bhaskaran Raman, Naveen Aggarwal, Divya Bansal, K. K. Ramakrishnan, “**GSM-based Positioning for Public Transportation Commuters**”, in proceedings of 7th International Conference on Communication and Networks (COMSNETS 2015), ITRA Workshop, Jan 6-10, 2015.

Projects Prototypes currently working on and Submitted.

1. “Video forgery Detection” submitted to **Nottingham University**, UK under Newton Bhabha Scheme for approval.
2. “Medical Image Database indexing and Retrieval” submitted to DST, GoI for approval.

Achievements:

- **Organizing Secretary** of 3rd **International conference** on Biomedical Engineering and Assistive Technologies (BEATS-2014), February 14-15, 2014.
- Consultant and Nodal Officer for Procurement, Finance and Management in State Project Facilitation Unit, UT Chandigarh for TEQIP-II.
- NBA Core team member to implement NBA regulations in UIET and prepared NBA proposal for UIET.
- Helped PEC to get ISO 9001 certification in 2003.
- Technical Committee Member of IEEE International conference on Recent Advances in Engineering and Computational Sciences, organized by Panjab University on 6-8 March 2013.
- Technical Committee Member of IEEE Second International Conference on Image Information Processing (ICIIP-2013), Organized by Jaypee University, Wagnaghat, December 9 - 11, 2013
- Technical Committee Member of Confluence 2013, An International Conference “The next generation Information Technology Summit” organized in AMITY University on 27-29 Sep 2013.
- Technical Committee Member of 2011 3rd International Conference on Computer Technology and Development (ICCTD 2011) www.icctd.org Chengdu, China. November 25-27, 2011.
- Technical program Committee Member of Int Journal of Computing and Digital Systems.
- Awarded Best paper Prize for paper “**Analysis of Lung Segmentation and Boundary Correction Techniques on Lung CT Image**” in CHASCON 2012.
- Awarded Best paper Prize for paper “**Real Time Human Activity Recognition Using Shape-from-Motion Reconstruction**” in CHASCON 2008.
- Successfully Conducted Infosys Foundation Program for students of UIET, DCET and SSGPURC, hoshiarpur during the summer vacation of 2008
- Successfully completed the first year of Sun Campus Ambassador program at UIET, Panjab University. Under this program 4 workshops and 4 tutorial program are conducted.
- 30 student projects are completed from Infosys Campus Connect Portal.
- Successfully Completed a Sabbatical project “Tool based Estimation Model Development” at Infosys Chandigarh from 10 July 2006 to 11 Aug 2006
- Developed the computing facility Labs at Ashoka Sr. Sec School, Amritsar in December 2005.

Workshops and Programs Conducted:

- Successfully Conducted Infosys Foundation Program for students of UIET, DCET and SSGPURC, hoshiarpur during the session 2008-2009
- Successfully completed the second year of Sun Campus Ambassador program at UIET, Panjab University. Under this program 4 workshops and 4 tutorial program are conducted.
- Organized a Faculty Workshop on Microsoft .Net technologies from 31 Jan to 2nd Feb 2009.
- Organized a Workshop on IPR in UIET in Feb 2009.
- Organized the various contests under Infosys Aspirations 2020 program at state level and national level.
- Coordinator of Infosys Sponsored One day workshop on Business Intelligence conducted on 24th February 2012 at UIET, Panjab University, Chandigarh.
- Co-Coordinator of One day workshop on MATLAB conducted on 17th July 2012, sponsored by TEQIP-II Program at Panjab University, Chandigarh.
- Coordinator of TEQIP Sponsored Two Week National Level Faculty Development Programme on “MATLAB Fundamentals and Neural Networks & Fuzzy Logic Toolboxes” from 3-14 December 2012 at UIET, Panjab University, Chandigarh.
- Organized a Robotics and Web Designing Workshop for School Students under the aegis of National Academy of Sciences, India.
- Infosys Webinar Series hosted every year in UIET.