

Professor Allam Appa Rao Vice Chancellor, JNTU Kakinada, Andhra Pradesh

Dr Allam Appa Rao received his Ph. D in the year 1984 from Andhra University, Visakhapatnam. During his more than four decades of professional experience, he shared his wisdom with fellow engineers and scientists across the globe through his innumerable research papers published in international journals and international conference proceedings.

15 scholars were awarded Ph. D degrees under his tutelage. Best Academician Award and Best Researcher Award were bestowed on him by Andhra University. Andhra Pradesh Government awarded him best Teacher award.

Prof Allam feels that there is a range of wild problems which can be effectively solved using computers; such as, modeling the operation of the human brain; and the role of logic in problem-solving. He also feels that Computer Engineering (CE) has direct links with many other branches of human knowledge such as Psychology, Cognitive Sciences, Linguistics, and Management. According to him, the multidisciplinary nature of Computer engineering inherits unlimited opportunities for discovering new applications and exploring new research directions.

Prof Allam's research contributions in Computer engineering are vital, varied and vast. He believes that Computer engineering is the "third pillar" that supports research, along with the pillars of theory and experimentation. He firmly believes that Computer engineering is an essential component to implement and strengthen any country's technological, economic and social goals. According to him the Information Technology (IT) is a symbiosis between Computer engineering and other disciplines and mediates new interactions among the technologies, in multiple levels and scales.

Prof Allam believes that the recent human genome breakthrough is the result from the work of multi-disciplinary teams where cooperation from computer experts was a fundamental ingredient. He stresses that the Cells and cellular systems require viewing them as information processing systems, as evidenced by the fundamental similarity between molecular machines of the living cell and computational automata, and by the natural fit between computer process algebras and biological signaling and between computational logical circuits and regulatory systems in the cell.

Prof Allam's current research work is influenced by his fascination about the mysteries that remain in the catalogue of human genes. He believes that a systematic approach to the acquisition, management, and analysis of information available in human genes and their study can greatly enhance the quality and efficiency of medicines. He believes that there is much to learn about the relationship of genes and disease, as well as the possible role of large sections of our DNA that seem to be junk with no function, leftover from evolution.

Dr Allam proposed new computing methods, and showed the way to better treatments of disease and better understanding of healthy life. Perhaps even more intriguing, his work may enable the design of entirely novel systems that could prove useful in applications ranging from medicines to environmental cleanup and more. He has published in PubMed http://www.ncbi.nlm.nih.gov/pubmed/

Prof Allam is hailed by his innumerable student friends across the globe as a man of unfathomable knowledge and by his friends as a wonderful human being.

Present Vice Chancellor

Position

Jawaharlal Nehru Technological University: Kakinada, AP,

India

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Permanent Home Address:

4-51-19/1, Lawson's Bay Colony, Visakhapatnam - 530 017

Date & Place of Birth

28th December, 1949, L' Kota, Vizianagaram (Dist), AP

Qualifications:

1. PhD (Engg), 1984, (Computer Engineering), Andhra University (AU), Visakhapatnam

2. MA, 1975, (Economics: Mathematical Economics and Econometrics), AU

3. BSc, 1967, (Mathematics, Physics and Chemistry), AU

Continuing Education

- 1. Post Graduate Diploma in Applied Statistics, AU
- 2. Post Graduate Certificate Course in Computer Science, Indian Statistical Institute (ISI), Kolkata
- 3. International Certificate Course in Systems Analysis and Design, International Centre for Theoretical Physics (ICTP) (TWAS, Italy)
- 4. Certificate Course on Digital Processing of Remotely Sensed Data (Space Applications Center, Ahmadabad)

Professional Certifications

- Chartered Engineer (Computer Engineering Division), Institution of Engineers (India), F 111382-4
- 2. Approved Valuer (Computer Technology), The Institution of Valuers, F 18504

3 Academic Excellence Achievement Awards

- 1. <u>Best Researcher</u> in Engineering in recognition of commendable record of research in Engineering, Andhra University, Visakhapatnam, India, 2003
- 2. <u>Best Teacher</u> in recognition of distinguished service as a teacher, Government of Andhra Pradesh, Hyderabad, India, 2006
- 3. The first ever recipient of Dr Sarvepalli Radhakrishnan (former President of India) Award for Best Academician in recognition of commendable record of Research and Teaching, Andhra University, Visakhapatnam, India, 2006

Honours

Elected Fellow of 6 Professional Organizations/ Societies

- 1. Elected FELLOW Society for Design and Process Science (SDPS), USA, (The first Professional Trans-disciplinary Society)
- 2. Elected FELLOW Institution of Engineers (India), FIE, F-111382/4
- 3. Elected FELLOW Institution of Electronics and Telecommunication Engineers, FIETE, F 188536. India
- 4. Elected FELLOW Indian Institution of Bridge Engineers, India FIIBE, LF-1667
- Fellow Member, International Society for Intelligent Biological Medicine (FISIBM) http://www.isibm.org/fellows.php
- 6. Fellow Institution of Valuers, India, F-18504/XV, Computer Technology including Electronics and Telecommunication Engineering (FIV)

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- 7. Honourary Fellow of Indian Institute of Chemical Engineers (IIChE) HF 37899
- 8. Elected Fellow, Royal Statistical Society, FRSS, 115183

6 International Editorial Boards

- 1. Area Editor: Journal of Integrated Design & Process Science: ISSN: 1092-0617
- 2. Editorial Board Member (as Reviewer) for the Journal International Journal of Modern Engineering (IJME)
- 3. Editorial Review Board Member: Academy of Information and Management Sciences Journal (AIMSJ)
- 4. International Advisory Board Member for Scientific Journal International (SJI)
- 5. Area Editor: Society for Design and Process Science (SDPS) Journals
- 6. Clinical Medicine: Endocrinology and Diabetes ISSN: 1178-1173

11 International Conference Chairs

- 1. Invited Talk at V International Conference on Systems Integration (ICSI*08),** to be held from Nov 09-11, 2008 at the Brasil XI Convention Center in Brasilia, Brazil.
- 2. Co Chair: Bioinformatics Panel Indian Science Congress January 3-7, 2008
- 3. Honorary Advisory Committee 11th World Conference on INTEGRATED DESIGN & PROCESS TECHNOLOGY (IDPT 08), Taichung, Taiwan, June 1-6, 2008
- 4. Distinguished Speaker 11th World Conference on INTEGRATED DESIGN & PROCESS TECHNOLOGY (IDPT 08), Taichung, Taiwan, June 1-6, 2008
- Distinguished Speaker International Conference on System Integration (ICSI 07), Brasalia, Brazil,
 2-5 December 2007
- Invited Speaker, 10th World Conference on INTEGRATED DESIGN & PROCESS TECHNOLOGY (IDPT 07), Antalya, Turkey, June 4-8, 2007
- 7. Conference Chair: 9th Annual IJME/INTERTECH Joint International Conference on Engineering and Technology: Research-Education-Entrepreneurship, Oct. 19-21, 2006, Kean University, New York City, USA
- 8. Distinguished Speaker in IEEE Computer Society 18th International Conference on Tools with Artificial Intelligence (ICTAI 06), Nov. 13-15, 2006 in Washington DC, USA. http://csdl2.computer.org/persagen/DLAbsToc.jsp?resourcePath=/dl/proceedings/&toc=comp/proce edings/ictai/2006/2728/00/2728toc.xml&DOI=10.1109/ICTAI.2006.101, http://portal.acm.org/citation.cfm?id=1190614.1191091&coII=GUIDE&dI=GUIDE&CFID=23107157&
 - http://portal.acm.org/citation.cfm?id=1190614.1191091&coll=GUIDE&dl=GUIDE&CFID=23107157&CFTOKEN=23207921
- 9. Keynote Speaker "Mathematical analysis of Diabetes Mellitus related proteins having high sequence complexity" in IEEE Computer Society 6th International Symposium on BioInformatics and BioEngineering (BIBE 06), Oct. 16-18, 2006 in Washington DC, USA.
- 10. Distinguished Speaker: 9th World Conference on INTEGRATED DESIGN & PROCESS TECHNOLOGY (IDPT 06), June 25-30 2006, San Diego, California, USA
- 11. Invited Speaker: 33rd Annual Conference of Research Society for the Study of Diabetes in India (RSSDI), 23-25 September, 2005, Bangalore, India

4 International Program Committees

- 1. IV International Conference on System Integration (ICSI 07), Brasilia, Brazil
- 2. International Program Committee Member: International Conference on Bioinformatics and Computational Biology (BIOCOMP 07)
- 3. International Program Committee Member: International Conference on Software Engineering Research and Practice (SERP 07)
- 4. International Program Committee Member: 10th World Conference on INTEGRATED DESIGN & PROCESS TECHNOLOGY (IDPT 07)

<u>21</u> Grants (Grantsmanship)

- 1. DoE: Department of Electronics-Technology Development Council (TDC) Project on Computer Aided Instruction in PASCAL & FORTRAN 77, Year of Sanction: 1984, Amount: Rs. 13,35,300/-
- 2. DST: Department of Science and Technology: Project on Data Bases & Thematic Maps, Year of Sanction: 1989, Amount: Rs. 3,00,000/-, Sanction: F- ES/11/038/86 dt.31-01-89

- 3. MHRD: Ministry of Human Resource Development Project on Pattern Analysis Using Mathematical Morphological Methods, Year of Sanction: 1989, Amount: Rs. 13,50,000/-, Sanction: F-20-2/88 T.14 dt 14-02-89
- 4. MHRD: Project on Pattern Analysis Using Mathematical Morphological Methods (Extension), Year of Sanction: 1991, Amount: Rs. 2,00,000/-, Sanction: F-19-2/90 TD.VI (PT.1) dated 19-03-91
- 5. CLASS Computer Literacy And Studies in Schools, Year of Sanction: 1990, Amount: Rs. 10.00.000/-
- 6. MHRD: Project on Institute for Software Engineering & Expert Systems, Year of Sanction: 1991, Amount: Rs 8,00,000/-, Sanction: F.1-4/90.TD.VI dt 10-01-91
- 7. MHRD Project on Computer Aided Environmental Planning Through Health Impact Assessment for Visakhapatnam, Year of sanction: 1992, Amount: Rs. 8,00,000/-, Sanction: F.2.9/91.TD.VI dt 21-01-92
- 8. MHRD Project on Development of Software Using Neural Networks Methodology, Year of Sanction: 1992, Amount: Rs 10,00,000/-,Sanction:F.1.4/91.TD.VI dt 27-01-92
- 9. MHRD Project on Development of Neural Networks Laboratory, Year of Sanction: 1992, Amount: Rs10,00,000/-, Sanction:F.17.1/91.TD.Vldt 04-03-92
- 10. DRDO: Defence Research Development Organization-Directorate of Training and Sponsored Research Project: MSc (Computer Software), Sanction: DRDO/85016/OSD/ANDH-ACTT/CC(A), Amount: Rs 2,00,00,000/-
- 11. MHRD Project on Modernization of Software Laboratory, Year of Sanction: 1992, Amount: Rs 10,00,000/-, Sanction:F.3.1/91.TD.VI dt 27-02-92
- 12. University Grants Commission (UGC), Project on Design of Parser and Lexical Analyzer, Year of Sanction: 1993, Amount: Rs 2,53,000/-, Sanction: F.4.16/91(T-II) SR-I) dt 13-03-95
- 13. MHRD Project on Object Recognition System, Year of Sanction: 1993, Amount: Rs.10, 00,000/-, Sanction: F.1.1/92.TD.VI dt 25-01-93
- 14. MHRD Project on Prototype of Wrist Sensor for use in Industrial Robots, Year of Sanction: 1993, Amount: Rs 5,00,000/-, Sanction: F.1.1/92.TD.VI dt 25-01-93
- 15. MHRD Project on Development of Computer Aided Instruction Laboratory (CAI), Year of Sanction: 1993, Amount: Rs. 8,00,000/-, Sanction: F.3.1/93.TD.VI dt 22-11-93
- 16. MHRD Project on Development of Artificial Intelligence Laboratory, Year of Sanction: 1993, Amount: Rs 10,00,000/-, Sanction: F.3.1/91.TD.VI dated 21-01-93
- 17. MHRD Project on Development of Informatics laboratory, Year of Sanction: 1993, Amount: Rs. 10,00,000/-, Sanction: F.3.1/91.TD.VI dated 12-01-93
- 18. MHRD Project on Development of Networks laboratory, Year of Sanction: 1993, Amount: Rs. 10.00.000/-. Sanction: F.3.1/91.TD.VI dated 12-01-93
- 19. MHRD Project on Knowledge Support System for Resource Allocation, Year of Sanction: 1994, Amount: Rs 5,00,000/-, Sanction: F.2.2/93.TD.VI dt 24-03-94
- 20. AICTE: All India Council for Technical Education, Project on Design of a PC-Based Real-Time Vision System for a Welding Robot Arm, Year of Sanction: 1998, Amount: Rs 5,00,000/-, Sanction: F.No.8017/RDII/Comp./260/98 dt.20-03-98
- 21. AICTE Project on Design of a Vision System, Year of Sanction: 1999-2000, Amount: Rs 10,00,000, Sanction: No.8018/RDII/BOR/R&D (180)/99-2000 dt.24-03-2000

40 years of Professional History:

- 1. Currently Vice Chancellor, JNTU: Kakinada, AP, India
- Principal, Andhra University College of Engineering (Autonomous), Visakhapatnam
- 3. Dean/ Chairman: Faculty of Engineering, Andhra University
- 4. Academic Senate Member, Andhra University
- 5. Professor, Andhra University, From 05-05-1987
- 6. Chairman: Board of Studies in Computer Science and Engineering, Andhra University, April 1999 June 2002
- 7. Head: Department of Computer Science and Systems Engineering, Andhra University, September 1991 September 1994

- 8. Chief Warden: Andhra University Engineering College Hostels, November 1991 September 1994, Student and Hostel Administration apart from Teaching and Research
- Course Coordinator: DRDO-DTSR Project, Andhra University, 1986-1992, MSc (Computer Software) course Management and Instruction apart from Regular Teaching and Research
- 10. Professor/ Professor cadre/ Director/ Head University Computer Center, Andhra University, August 1985, PG Teaching, Software Design and development and Administration
- 11. Head/ Director Andhra University Computer Center, June 1984 July 1985, PG Teaching Software Design and Development and Administration
- 12. In-charge: Andhra University Computer Center, June 1976 May 1984, Software Development, Training Programs, Research, Management, Academic Administration
- 13. Computer Professional, Andhra University Physics Department / Computer Center, December 1967 - May 1976, Data Preparation and Software Development

5 International Workshops / Seminars / Symposia organized

- 1. IWTR 2008: International Workshop on Translational Research
- 2. IWTER 2007: International Workshop on Transdisciplinary Education and Research
- 3. CERATEC 2007: International Conference on Ceramic Technology, January 8-10, 2007, http://www.ceratec2007.com/index.html
- 4. ICBDM 2006: International Conference on Bioinformatics and Diabetes Mellitus 25th to 27th March 2006, Andhra University, Visakhapatnam
- 5. WIPRA 96: Workshop on Image Processing Applications

4 Areas of Specializations:

Please visit www.allamapparao.org for more details

- 1. Bioinformatics and Computational Biology
- 2. Knowledge Management
- 3. Software Engineering
- 4. Network Security

Current Area of Research:

Finding solutions to formal and practical problems inspired from the computational management and computational analysis of biological data with the paradigm of crystallization of computational thinking.

Patents Filed at Review Stage

1. Method(s) of stabilizing and potentiating the actions and administration of Brain-Derived Neurotrophic Factor (BDNF) Inventors: Appa Rao Allam and U N Das. A method of stabilizing and potentiating actions and administration of neurotrophins such as brain-derived neurotrophic factor (BDNF), neurotrophin-3, neurotrophin-4, and nerve growth factor and their receptors by using in coupling conjugation with polyunsaturated fatty acids (PUFAs) in the prevention and/or treatment of obesity, type 2 diabetes mellitus, metabolic syndrome X, Alzheimer's disease, depression, Parkinson's disease, and schizophrenia is described. The invention is directed to the efficacious use of various neurotrophins by using them in combination with polyunsaturated fatty acids chosen from linoleic acid, gamma-linolenic acid, dihomo-gamma-linolenic acid, arachidonic acid, alpha-linolenic acid, eicosapentaenoic acid,

docosahexaenoic acid, cis-parinaric acid, docosapentaenoic acid and conjugated linoleic acid in predetermined quantities. The invention also provides methods of efficiently delivering neurotrophins to the desired areas of the brain by complexing or conjugating with PUFAs, so that they are able to cross blood brain barrier efficiently and reach the desired regions of the brain in adequate amounts. IPC8 Class: AA61K3818FI USPC Class: 514 12 http://www.faqs.org/patents/inv/83318

- Method(s) of preventing, arresting, reversing and treatment of atherosclerosis Inventors: Allam Appa Rao and U N Das. A method of preventing, arresting, reversing and treatment of atherosclerosis by enhancing the activities of .DELTA..sup.6 and .DELTA..sup.5 desaturases such that the cell, tissue, and plasma levels of various polyunsaturated fatty acids (PUFAs) and, in particular that of endothelial cells lining the blood vessels will increase. More particularly, the invention is directed to enhance the activities of .DELTA..sup.6 and .DELTA..sup.5 desaturases that, in turn, will lead to increased production of products of polyunsaturated fatty acids such as prostacyclin (PGI.sub.2), PGI.sub.3, lipoxins, resolvins, protecting, PGE.sub.1 (prostaglandin E.sub.1), nitric oxide, and nitrolipids such that atherosclerotic process will be prevented, arrested, reversed and this will lead to efficient arrest, regression, prevention and/or treatment of even established atherosclerosis and its associated conditions. More particularly, the invention is directed to the delivery of proteins, peptides, lipids, lipoproteins, glycolipids, synthetic chemicals such as statins and their derivatives, troglitazones and their derivatives, and other compounds (synthetic or natural) that have the ability to enhance the activities of .DELTA..sup.6 and .DELTA..sup.5 desaturases in vivo, also provides methods of efficiently delivering cDNA clones of .DELTA..sup.6 and .DELTA..sup.5 desaturases and genes of .DELTA..sup.6 and .DELTA..sup.5 desaturases to endothelial cells and other target cells to prevent, arrest, reverse and treat atherosclerosis. IPC8 Class: AA61K9127FI, USPC Class: 424450. http://www.faqs.org/patents/inv/171637
- 3. Butyrylcholinesterase as a marker of grade low systemic inflammation (The invention relates to a method of detecting and diagnosing low-grade systemic inflammatory conditions such as insulin resistance, type 2 diabetes mellitus, hypertension, hyperlipidemias, and Alzheimer's disease using plasma and/or tissue levels of butyrylcholinesterase as a marker. In addition, for the prevention, treatment, and monitor prognosis of various cancers, and acute and chronic inflammatory conditions such as rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), progressive systemic sclerosis (PSS), mixed connective tissue disorder (MCTD), vasculitis; and other disorders caused by uncontrolled angiogenic activity such as proliferative diabetic retinopathy; other eve disorders such as macular degeneration; and central nervous system disorders such as multiple sclerosis, Alzheimer's disease; skin problems such as psoriasis, renal conditions such as chronic renal failure, end-stage renal disease, glomerulonephritis such as minimal change nephropathy, various forms of proliferative glomerulonephritis, nephritis secondary to underlying systemic diseases such as collagen vascular diseases, lymphoma and leukemias; and other disorders in which cell proliferation and angiogenesis plays a dominant role and which are also characterized by low-grade systemic inflammation, development of a reliable, unique and specific marker is essential.) Submitted to USPTO: Number 60/898,450 dated 31st January 2007, Inventors Allam Appa Rao, G R Sridhar and U N Das

4 Patents (1 US and 3 Indian) Filed i) US

1. Method of Prevention and Treatment of Pathological Retinal Angiogenesis (The invention relates to a strategy or method of preventing and treatment of pathological retinal angiogenesis that occurs in diseases such as retinopathy of prematurely in children, diabetic retinopathy, and age-related macular degeneration in which cell proliferation and angiogenesis plays a dominant role by the use of a specific monoclonal and polyclonal antibodies against vascular endothelial growth factor (VEGF) that is coupled to polyunsaturated fatty acids (PUFAs) such as eicosapentaenoic acid, docosahexaenoic acid, and their products lipoxins, resolvins and neuroproteins) USPTO: 60/959,517 dated 16th July 2007, Inventors Allam Appa Rao and U N Das

ii) 3 Indian Patents

Patents Number CBR - 2732; Application Number 2066/CHE/2007, Inventors U N Das and Allam Appa Rao

- 1. Butyrylcholinesterase as a marker of persistent cancer: The invention generally relates to a strategy or method of detecting and diagnosing persistent cancer that results in low-grade systemic inflammation as seen in lymphomas, leukemias; and other disorders in which cell proliferation and angiogenesis plays a dominant role and which are also characterized by low-grade systemic inflammation. The present invention relates to a strategy or method of detecting, diagnosing, and prognosticating all the above-mentioned conditions using plasma and/or tissue levels of butyrylcholinesterase as a marker of these diseases.
- 2. Butyrylcholinesterase as a marker of collagen vascular

CISCASES: The invention generally relates to a strategy or method of detecting and diagnosing acute and chronic low-grade systemic inflammatory conditions such as rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), progressive systemic sclerosis (PSS), mixed connective tissue disorder (MCTD), vasculitis; glomerulonephritis secondary to underlying systemic diseases such as collagen vascular diseases, in which cell proliferation and angiogenesis plays a dominant role and which are also characterized by low-grade systemic inflammation. Development of a reliable, unique and specific marker for these conditions is essential. The present invention relates to a strategy or method of detecting, diagnosing, and prognosticating all the above-mentioned conditions using plasma and/or tissue levels of butyrylcholinesterase as a marker.

3. Method of Prevention and Treatment of Pathological

Retinal Angiogenesis: The invention generally relates to a strategy or method of preventing and treatment of pathological retinal angiogenesis that occurs in diseases such as retinopathy of prematurity in children, diabetic retinopathy, and age-related macular degeneration in which cell proliferation and angiogenesis plays a dominant role by the use of a specific monoclonal and polyclonal antibodies against vascular endothelial growth factor (VEGF) that is coupled to polyunsaturated fatty acids (PUFAs) such as eicosapentaenoic acid, docosahexaenoic acid, and their products lipoxins, resolvins and neuroprotectins. More particularly, the invention is directed to the efficacious use of therapeutic monoclonal and polyclonal antibodies in the treatment of pathological retinal angiogenesis. In principle, the present invention describes a method of effectively using monoclonal antibodies or specific polyclonal antibodies against vascular endothelial growth factor to prevent and treat the destructive angiogenesis that occurs in the eye seen in pathological conditions such as retinopathy of prematurity in children, diabetic retinopathy, and age-related macular degeneration to ameliorate by directly inhibiting neovascularization and/or by controlling vessel loss in order to reduce the hypoxic stimulus that drives neovascularization

50+ strong Research Team PhDs awarded (15+8)

- 1. <u>1997</u>, Mr. G. Samuel Varaprasada Raju, '<u>Collision free path planning and obstacle avoidance using Dynamic Programming</u>', **gsvprajudr9@yahoo.co.in**, 98493 43662, **Jointly with Prof M Ananda Rao of AU Mechanical Engineering**
- 2. <u>2001</u>, Ms M. Syamala Devi, '<u>Design of a Multi Agent System for Co operative Decisions and Management</u>', **syamala@pu.ac.in**, **msyamala1@rediffmail.com**
- 3. 2003, Mr G S Prasad, 'Knowledge based approach for Automated Digital Image Processing': (Cited in India Science Abstracts ISSN: 0019-6339, Volume 43), Jointly with Prof I Ramesh Babu, Acharya Nagarjuna University, Guntur
- 4. <u>2003</u>, Mr M.V.L.N. Raja Rao, '<u>A Comprehensive Study on the Reliability of Software Testing Tools using Test Suit Methodology for Quality Software <u>Development</u>', <u>rajarao.mamidanna@gmail.com</u></u>

- 5. <u>2005</u>, Mr <u>Chennamsetty</u> Divakar, '<u>Algorithmic techniques in Computational Proteomics</u>',(Cited in India Science Abstracts ISSN: 0019-6339, Volume 43), divakar_c@yahoo.com
- 6. <u>2007</u>, Mr Suryanarayana Dasika, '<u>Computer-aided prediction of active sites in enzymes'</u>, surya_dasika@yahoo.com, Achary Nagarjuna University, Guntur, AP
- 7. 2007, Mr Tirumala Kodanda Ramakrishna Rao, 'Analysis of functional Protein Sequences in Insulin Resistance Syndrome: A Bioinformatic Study', ramakrishnatk@gmail.com, 94410 73082, Acharya Nagarjuna University, Guntur, AP
- 8. <u>2007</u>, Mr Hanuman Thota, '<u>Bioinformatic Analysis of Diabetic Micro Vascular Complications</u>', hanumanthota@gmail.com, 98491 58545, Acharya Nagarjuna University, AP
- 9. 2007, Mr Reddi Kiran Kumar, '<u>Functional Protein Sequence Analysis of genes involved in Alzheimer's Disease: A Bioinformatic Study</u>', kirankreddi@gmail.com, 94408 72455, Acharya Nagarjuna University, AP
- 10.2008, Mr Adimulam Yesubabu, 'Computational analysis of significant genes causing Diabetic Nephropathy', adimulam9@yahoo.com, 98482 28856, Andhra University
- 11.2008, Mr A. Siva Prasad, 'Identification of Biomarkers for Alzheimer's Disease and Type2 Diabetes Mellitus: A Bioinformatic Approach', a.prsadam@gmail.com, 0 99005 66762, Acharya Nagarjuna University, Guntur, AP
- 12.2008, Mr Ch. Suresh Babu, 'Identification of Biomarkers for Diabetic Macrovascular Complications: A Bioinformatics Approach', changalsettysureshbabu@gmail.com, Acharya Nagarjuna University, Guntur, AP
- 13.2008, Mr Kudipudi Srinivas, 'Computational Prediction of Butyrylcholinesterase Function through Domain Analysis, Secondary Structure Analysis and Protein-Protein Interaction', kudipudi72@gmail.com, 94407 36108, Acharya Nagarjuna University, Guntur, AP
- 14.2009, Ms P. V. Lakshmi, '<u>Computational Strategies for the Study of Biomolecules'</u>, pvl 7097@rediffmail.com, Andhra University
- 15.2009, Ms Golagani Lavanya Devi, 'Novel Techniques to Cluster Large Repository of Protein Sequence Databases', lavanyadevig@yahoo.co.in, JNTU: Hyderabad, (jointly with Dr Avula Damodar, JNTU Hyderabad)

PhDs submitted

- 16.2009, Mr S. Gopala Sastry, '<u>Development of a Green Model for conceptualization of the infrastructural Requirement in respect of the water regime in an expanding urban scenario'</u> (jointly with Prof S. Ramakrishna Rao of Civil Engineering, Andhra University)
- 17.2009, Ms Nimmala Mangatayaru, 'Computational docking analysis of daibesity-a bioinformatics approach'
- 18.2009, Ms R. Bhramaramba, bhramarambaravi@gmail.com '<u>Data Mining</u> <u>Techniques For Bioinformatic Applications Related to Diabetes Mellitus Proteins</u>' (jointly with Prof V. Vijaya kumar, JNTU Hyderabad)
- 19.<u>2010, Mr Sudhir Kumar Pasala, 'Analyzing for attribute of Obesogenic Environments for Design of healthy Built Environments',</u>
- 20.<u>2010, Ms</u> Saradha Jyothi, Botony, 279 7897 (Jointly with Prof B. Subba Rao of Botony, AU)
- 21.2010, Mr Kopparti V V Satyanarayana, '<u>A Dynamic Programming and Computational Analysis of Identification of Genes toward Medical Diagnosis in Insulin Resistance Syndrome Associated Coronary Artery Diseases', kopparti61@gmail.com, 94407 13334, (Acharya nagarjuna University)</u>

- 22.<u>2010</u>, Mr Ramamurty, Adapa ' <u>Bioinformatics analysis of Diabetic Cardiomyopathy</u> ' (jointly with Prof P V G D Prasada Reddy, Registrar, Andhra University), ram111_sai@yahoo.com, 98483 80889
- 23. <u>2010</u>, Mr P V Nageswara Rao, '<u>Application of Neural Networks to Biological Data: ProteinClassification and Secondary Structure Prediction</u>', 094409 45789,

PhDs in Progress

- Mr Kopparti Suresh, sureshkgrl@hotmil.com, 94901 71459, Andhra University
- Mr Thota Veeraswamy, '<u>Computational aspects of Diabetic Neuropathy</u>' thota.vs@gmail.com, 98490 35669, Andhra University
- Mr M R Narasinga Rao, 'A Clinical Decision Support System using <u>Multilayer</u> <u>PerceptronNeural Network to assess well being and quality of life in Diabetes</u>', mrn702002@yahoo.co.in, 98660 21400, Andhra University
- Mr R. Rajender, kavitharaj70@yahoo.co.in, 94901 07528, Andhra University
- Mr B. Poorna Satyanarayana, poornaphd@hotmail.com, 94401 23178, Andhra University
- Ms P. Kanchanamala, kanchanakanta@yahoo.com, 99481 03080, Andhra University
- Mr Kunjam Nageswara Rao, kunjamnag@yahoo.com, 94401 14703, Andhra University
- Mr G. Nageswara Rao, gnraoaitam@yahoo.com, 94407 58550, Andhra University
- Mr BRVSRK Raju, rkraju_bhvs@yahoo.com, 94404 57276, Andhra University
- Mr Vasamsetty Chandrasekhar, chandu_vasamsetty@gmail.com, 94403 51652, Andhra University
- Ms Lakshmi Jagadamba, P., lakshmipulugurtha@gmail.com, 98484 83016, Andhra University
- Mr Suresh Babu Mudunuri, sureshverma@gmail.com, 98666 00002, Andhra University
- Mr N. Yogi Balaji, yogibalaji80@gmail.com, 94403 66299, Andhra University
- Mr K. Seshadri Sastry, aditya_shas@yahoo.com, 939 388 3567, Andhra University
- Mr V. Hanuman Kumar, it.hanuman@gmail.com, 92471 04580, Andhra University
- Mr M. Prasada Rao, prasadrao.m@gmail.com, 99666 13516, Andhra University
 a. Acharya Nagarjuna University
- Mr P V Nageswara Rao, nagesh.uma@gmail.com, 934 6274653, 284 0298
- Ms Uma Devi Nageswara Rao, uma@gitam.edu,
- Ms Kanadam Kartika Pavan, karteeka@yahoo.com
- Mr Krishna Subba Rao, P., krishna.pulugurtha@gmail.com, 98484 80916
- Mr M. Naresh Babu, nareshmuppalaneni@yahoo.com, 94900 87210
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Guided 250⁺ MTechs/MPhils: (Details are available at

www.allamapparao.org)

- 1. Computer Science and IT related areas: Guided 131 M.Tech Theses
- 2. Computer Networks: Guided 28 M.Tech Theses
- 3. Network Security: Guided 22 M.Tech Theses
- 4. Bioinformatics and Computational Biology: Guided 45 M.Tech Theses
- 5. Protein Structure Prediction and Modeling: Guided 15 M.Tech Theses
- 6. Image Processing: Guided 10 M.Tech Theses
- 7. Intrusion Detection: Guided 9 M.Tech Theses
- 8. Information Systems Control and Audit : Guided 16 M.Tech Theses
- 9. Computational aspects of Diabetes: Guided 15 M.Tech Theses
- 10. Cooperative Computing and Multi-Agent Technologies: Guided 4 M. Tech Theses

Authored <u>75</u>⁺ Refereed International Journal Papers for which Reprints are available

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- 141. Allam Appa Rao, 1986, A Mathematical Model to Arrive at an Optimal Mix in a Heavy Engineering Industry, OR 85 held at Jamshedpur during 13 15 December 1986.
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Authored 18 Technical Reports

- 1. 2000, AICTE Project on Design of a Vision System (2000) Research Report submitted to AICTE, New Delhi.
- 2. 1998, AICTE Project on Design of a PC Based Real Time Vision System for a Welding Robot Arm (1998) Research Report submitted to AICTE.
- 3. 1994, Research Project on Knowledge of Support System for Resource Allocation (KSSRA) (1994). Submitted to MHRD.
- 4. 1993, Research Project on Design of Parser and Lexical Analyzer. (1993) Research Report submitted to UGC.
- 1993, Research Project on Object Recognition System (ORS) (1993) Research Report submitted to MHRD.
- 6. 1992, Research Project on Computer Aided Environmental Planning Through Health Impact Assessment for Visakhapatnam (1992) Research Report submitted to MHRD.
- 7. 1992, MHRD Project on Development of Neural Networks Laboratory (DNNL) (1992) Research Report submitted to MHRD.
- 8. 1992, MHRD Research Project on Development of Networks Laboratory (DNL) (1992) Research Report submitted to MHRD.
- 9. 1992, MHRD Research Project on Development of Artificial Intelligence Laboratory (DAIL) (1992) Research Report submitted to MHRD.
- 10. 1991, CAI in PASCAL & FORTRAN 77 (PC Version), Research Report submitted to DOE, April 1991.
- 11. 1990, Research Project on Pattern Analysis Using Mathematical Morphological Methods (1990) Research Report submitted to MHRD.
- 12. 1990, Pattern Analysis using Mathematical Morphology, Research Report submitted to MHRD, April 1990.
- 13. 1998, Department of Science and Technology (DST) Project on Data Bases & Thematic Maps (1989) Research Report submitted to DST.

- 14. 1988, Databases and Thematic Maps, Research Report submitted to DST, April 1988.
- 15. 1981. Studies on Computer Performance Evaluation. (Ph. D) Dissertation 1981
- 16. 1981, IFS System: Programmer Manual, Research Publication of Bonn University, Bonn, West Germany, June, 1981.
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- 18. 1975, Linear Programming: Methodology and a Case Study of BHPV Ltd (Dissertation Report) 1975

Authored 6 Books:

- 1. Computer Science, Bioinformatics and Diabetes Mellitus
- 2. FIT: Fluency in Information Technology
- 3. Economics of Information Technology
- 4. Information Technology: An Incipient Culture
- 5. Making of a World Class University: The First 1000 Steps

Edited 2 Books:

- 1. Fundamentals of Computers for B.Com (Common Core Syllabus) Published by Telugu Academy, Hyderabad (2000-2001).
- 2. Computational Biology of Diabetes Mellitus, Allam Appa Rao and G R Sridhar, Printed and Published by the Director: Press and Publications, Andhra University, Visakhapatnam, India

Member of 11 National Expert Committees

- 1. All India Council for Technical Education (AICTE) Core Member
- 2. University Grants Commission (UGC) Standing Committee Member for Computer Education Development.
- 3. UGC Nominee on the Board of Governors of Regional Engineering College, Durgapur, West Bengal.
- 4. UGC Committee Member for the 7th, 8th, 9th and 10th Five year plans.
- 5. Ministry of Human Resource Development (MHRD), Expert to select candidates for 'Study abroad' scheme.
- 6. Department of Science and Technology (DST), Expert for Screening Proposals for funding Research Projects.
- 7. Expert to Screen Proposals for Indian Society for Technical Education (ISTE) Proposals.
- 8. Union Public Service Commission (UPSC) expert member for the selection of Computer Professionals.
- 9. Defense Research Development Organization (DRDO) expert member for the selection of DRDO in service candidates for M. Tech and M.Sc. courses.
- 10. Nominee Director, AMI SANAG Micromation Computer Company, Hyderabad.
- 11. Adviser, Centre for Advanced Studies in Microwave and Millimeter wave Technology (CASMIT), Calcutta, and West Bengal.

Visited 7 Countries extensively on academic activities

- 1. China, Duration: 18th June to 23rd June 2007, Purpose: 3rd India China Mission
- 2. <u>Turkey</u>, Duration: 1st June to 6th June 2007, Purpose: Invited Paper Presentation at 10th World Conference of Society for Design and Process Science at Antalya
- 3. <u>USA</u>, Duration: 23rd June 2006 to 5th July 2006, 16th 18th October 2006, Purpose: Distinguished Speaker, 9th World Conference of Society for Design and Process Science, San Diego, Keynote Speaker, BIBE 06, Washington DC
- 4. <u>UK</u>, Duration: Sep. 1992- Dec. 1992, Purpose: Academic Link Interchange Scheme of British Council, UMIST, Manchester
- 5. <u>Australia</u>, Duration: Nov, 1985, Purpose: First Pan Pacific Computer Conference at Melbourne University
- 6. Germany, Duration: Oct. 1980 June 1981, Purpose: Guest Professor / Scientist , (DFG), Bonn University, Bonn
- 7. <u>Italy</u>, Duration: Oct.1978-Dec. 1978, Purpose: Participant for a course on Systems Analysis at ICTP now Third World Academy of Sciences (TWAS), Trieste

Visited Belgium, Netherlands, Austria, France, Luxembourg and Singapore on various academic programmes

7 Memberships in International Professional Societies

- 1. Senior Member: Institution of Electrical and Electronic Engineers (IEEE) 517243
- 2. Life Member: Association of Computing Machinery (ACM) 3158298
- 3. Member: American Association for the Advancement of Science (AAAS) 20100211
- 4. Member: International Council of Systems Engineering (INCOSE) 2168010.
- 5. Member: International Association for Computing and Philosophy (IACAP)
- 6. Member: Human Proteome Organization, 2719
- 7. Member: International Association of Engineers, IAENG: 64153

6 Life Memberships in Indian Professional Societies

- 1. Life Member: Indian Society of Theoretical and Applied Mechanics (ISTAM) L/573
- 2. Life Member: Indian Science Congress Association, L12768
- 3. Life Member: Computer Society of India (CSI) 17415
- 4. Life Member: Knowledge Forum
- 5. Life Member: Indian Society for Technical Education (ISTE) 3490
- 6. Life Member: Indian Association of Medical Informatics (IAMI), PL93068