Meritorious Prof. Dr. S. M. Aqil Burney

http://www.drburney.net

Professor, College of Computer Science and Information Systems, IoBM
Head of Department (Actuarial Science and Risk Management)
Ex-Registrar University of Karachi
Ex-Chairman, Department of Computer Science, University of Karachi
Project Director and Director, UBIT, University of Karachi
Project Director and Advisor for Main Communication Networks



Over 43 years of Experience of Research, Teaching and Educational Management

Overview

Dr. Aqil Burney is currently working as Professor at College of Computer Science and Information Systems, IoBM. He is also a Meritorious Professor (R.E.) and approved supervisor in Computer Science and Statistics by the Higher Education Commission, Govt. of Pakistan. He was also the founder Director (UBIT) & Chairman of the Department of Computer Science, University of Karachi. He is also member of various higher academic boards of different universities of Pakistan. His research interest includes artificial intelligence, soft computing, neural networks, fuzzy logic, data mining, statistics, simulation and stochastic modeling of mobile communication system and networks and network security, bioinformatics and MIS in health services and Urdu-language processing.

Education

Prof. Dr. S. M. Aqil received Ph.D degree in mathematics from Strathclyde University, Glasgow with specialization in estimation, modeling and computer simulation of multivariate time series models/algorithms and software development. He received M.Phil in 1983 with specialization in computing, simulation and stochastic modeling in risk management.

First class first M.Sc. (Statistics) in 1972 from University of Karachi also highlights his marvelous educational achievements. During M.Sc. the emphasis was on modeling and simulation in econometrics. He did his B.Sc. (Physics, Mathematics, Statistics) from D.J. College in 1970 which is affiliated with the University of Karachi.

Research, Publications He is author/co-author of four books, various technical reports and has published more than 130 research papers in national and international research journals and attended around 60 national and international conferences/seminars/symposiums. He supervised hundreds of projects in operation research, statistics, simulation and modeling, software and intelligent systems, stochastic processes biological/physical sciences. Eight research scholars completed Ph.D and five research students completed M Phil / M.S under his supervision in mathematical and computing sciences. At present more than five M.S./Ph.D. scholars are working under his supervision in the field of CS/IT and statistics in CS/IT.

Dr. Burney is active researcher and professor of ICT with strength in mathematical and statistical modeling in science, technology, business and social sciences. Prof. Burney has supervised six Ph.D.s and has published more than 30 research papers in international conferences and journals in the year 2010–12.

Participation in Educational bodies / committees

He was a member of Board of Advanced Studies, University of Karachi (2007-2010), member of Charter, Inspection & Evaluation Committee for private universities of Sindh since 2004 and also member of Sindh IT Board, Ministry of Information Technology, Govt. of Sindh. Dr. Burney is also a referee of various national and international journals and was conference and programme chair for many international conferences and delivered invited lectures.

Member of Professional bodies He is a member of many international research groups and bodies including IEEE (USA), ACM (USA), World Academy of science (Engineering and Academy), World Scientific and Engineering Academy and Society (WSEAS), Royal society of Statistical Society (UK), Islamic Society of statistical sciences and Computer Society of Pakistan. He has been teaching since 1973 in various universities such as Agriculture University Tandojam, University of Karachi, Gomal University, NED, IBA (Karachi), Sindh University, IBA –Sukkur and University of Baluchistan on full time basis, as visiting faculty and research associate in the field of econometrics, bio-statistics, statistics, mathematics and computer science.

Educational / Professional Management He has a vast education management experience at the university level. He was Chairman of the Department of Computer Science (three times), Founding Director, UBIT, Registrar, University of Karachi, acting Dean Faculty of Science, University of Karachi, as well as Founding Director, Main Communication Network, University of Karachi. (2006-January 2011).

Dr. Burney also helped, guided and advised in establishing private higher educational institutions in Pakistan, especially in Sindh in coordination with UGC(1980-2000), HEC and with Government of Sindh (2004 – date)

Information and Communication Projects

Prof. Burney has wide experience in conceiving, presenting and managing ICT projects which include: strengthening the Department of Computer Science Project sponsored by Ministry of Science and Technology (2001-2005) with emphasis on laboratories development and strengthening the teaching faculty; Development of High speed Fiber optics Networks with Wireless Support at University of Karachi, sponsored by HEC (2002-2006); Development of UBIT, ICT infrastructure and teaching facilities sponsored by University of Karachi and HEC (2002-2009). He was also the secretary of Endowment fund project of Karachi University Information Technology Trust. Now Prof. Burney is re-employed as Meritorious Professor w.e.f. May 1, 2011 the in Department of Computer Science, University of Karachi.

Medals and Honors

Dr. Burney had been awarded best IT academician in the Country in 2003 by NCR (Pakistan). He was also a member of national curriculum committee on CS/SE and IT (1996–2011). He was the convener of national curriculum revision committee of BS/MS Software engineering in 2009. For further information see detail resume or visit the website www.drburney.net In this year 2012, Pakistan Intellectual Forum award Al-Khwarizmi Gold Medal Award on the meritorious work in Information Communication and Computer Science.

Contributions to Society and public awareness Prof. Dr. Aqil Burney has supervised with keen interest several social works and projects of public interest. He conducted research work for special persons deaf & blind and gave a homogeneous education model for normal and special students to study in the same class and helped in developing girls/women IT education centre of Sadiq Foundation Noshero Feroz. Professor Burney is also running Burney education trust to sponsor needy & intelligent students in ICT and other physical and Social Sciences.

He also helped in Computer Literacy Program in Orangi Pilot Project in 1990s.

He was interviewed widely for newspapers, magazines and electronic media (Radio and TV Channels).

Professor Burney also elected as the Chairman of National Standard Committee on Information Communication Technology (NSC-ICT) of Pakistan Standards & Quality Control Authority, Government of Pakistan. (MoST).

International Conferences (Presentations)

Prof Burney regularly attending conferences and seminars and presenting research work especially in AI, Soft Computing, Risk Management.Risk theory.

Curriculum Vitae of

MERITORIOUS PROFESSOR DR. S.M. AQIL BURNEY

Professor, CCSIS - IoBM & UNIVERSITY OF KARACHI

(Over 42 years experience of Teaching, Research & Academic Management and Administration)

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Telephone: 92-21-34824081 (H) | 92-21-99261300-6 Ext 3345,
3462,3447,2447,2462 (O) | 92-0300-9261917 (C)

Personal Information

1. Place of Birth Karachi

2. Date of Birth 13 January 1951, Date of retirement: 12 January, 2011

3. Nationality Pakistani

4. Service Served at University level at various administrative and teaching

positions for about 40 years (Re-employed from 30 April 2011 as

Meritorious Professor, University of Karachi)

Qualifications

Degree	University	Year
Matriculation	Karachi Board	1966
H.S.C.	Karachi Board	1968
B.Sc.	Karachi	1970
M.Sc.	Karachi	1972 (First Class First Position)
M.Phil	Karachi	1983
Ph.D.	Strathclyde	1987 (On Scholarship by Govt. of Pakistan)

Specializations and Research Interests

Field of Specialization (M.PHIL):

Stochastic models of insurance business & related computing methods

Field of Specialization (PhD):

Estimation of Parameters of Multiple Time Series Models (Development and analysis of algorithms & simulation studies i.e. signal analysis in time domain).

Fields of Research and Development (1980-2016):

Simulation & Modeling, Data Mining, Software Development for Time Series Models / Temporal Databases, Communication & Networking, Project Management, Risk Management, Actuarial Science & Econometrics, Soft Computing and Artificial Intelligence(Bayesian Networks, Neuro Fuzzy Logic), Networking Planning & Management, Cyber Security, University and Industry Coordination Projects, Project Management, Operations Research in ICT and Urdu language Processing. Statistical Modeling and Simulation in Business and Technologies.

Countries Visited

for Conferences, Seminars & Education (As Conference Chair and member of various International conferences (see www.drburney.net) on ICT/Mathematics, Statistics, AI, Soft Computing & Network Management and cyber culture with invited lectures abroad.

- United States (New York, Rochester, Washington D.C.)
- Canada
- United Kingdom
- Malaysia
- Singapore
- Morocco
- Italy
- Indonesia
- Saudi Arabia
- UAE
- Turkey

Experience:

More than 42 Years experience of teaching in the following institutions

1)	Agriculture University, Tandojam	1973
2)	University of Karachi	1973-75
3)	Calgary University Teaching Assistant	1975-76
4)	University of Karachi	1976-77
5)	Gomal University	1977-78
6)	University of Karachi	1978 – 2011(Rtd on 12 Janury 2011
7)	Strathclyde University Teaching Assistant	1984-87
8)	NED University(Visiting)	1989-91
9)	Sind University (Supervision of Ph.D. students)	1992-96
10)	Courses or Invited Lectures; Advisory at many private sector Universities such as Sir Syed University of Engineering & Technology, PAF-KIET, KIIT, IBA(Karachi), NIPA, NUST(Karachi), FAST, Hamdard University, Iqra University, CBM, MAJU, Allama Iqbal Open University, Islamabad, IBA (Sukkur, Sindh) etc.	1995-2009

11) Invited / Guest Speaker & Teacher for Research Methods & Curriculum 2009-continued Development. 2009-2010, by HEC, University of Karachi, IBA Sukkur (Sindh).

1)	Lecturer	1973 to 1975
2)	Teaching Assistant	1975 to 1976
3)	Co-Operative Teacher	1976 to 1977
4)	Lecturer	1977 to 1982
5)	Assistant Professor	1982 to 1992
6)	Associate Professor	1992 to 1995
7)	Professor	1995- continued
8)	Chairman, Deptt. of Computer Science	May1994- Sep,
,		2000
9)	Professor Deptt. of Statistics	Sep, 2000 to Oct,
,	1	2001
10)	Professor Deptt. of Computer Science	Nov 2001 to
- /	r r	12 January 2011
11)	Visiting Professor, Deptt. of Computer Engineering, SSUET	Feb, 2001- continue
12)	Visiting Faculty, Deptt. of Computer Science, PAF KIET	Oct 2000 – continue
13)	Visiting Faculty, FAST-ICS	1988-89
14)	Registrar, University of Karachi	Oct 2001 - Sep 2002
15)	Project Director, Development of Deptt. of Computer Science,	Jan 2002 – 10
/	University of Karachi (MoST)	January 2011
16)	Project Director, Umear Basha Institute of Information	April 2002 –
10)	Technology (UBIT), University of Karachi . Now Director	March 2009.
	(UBIT/DCS)	Director 6March
	(OBITI BOS)	2009 to 10 January
		2011
17)	Project Director, Establishment of High Speed Fiber Optic Based	September 2003
17)	LAN with Wireless Computing Support at University of Karachi	10 January 2011
18)	Project Director, University of Karachi Information Technology	2004
10)	Trust	10 January 2011
19)	Member Charter Inspection and Evaluation Committee,	2004- continued
1))	Education and Literacy Department, Government of Sindh.	2001 continued
20)	Grade BPS-21, awarded by Governor Sindh / Chancellor,	30 th Sep,2006
20)	University of Karachi.	30 Bcp,2000
21)	Member, Board of Advanced Studies & Research, University of	13 th Sep,2007
21)	Karachi.	13 Sep, 2007 12 th Sept 2010
22)	Founding Director, Main Communication Networks, University	18 th Nov 2006
22)	of Karachi & (Website of University of Karachi)	10 January 2011
23)	Chairman, Deptt. of Computer Science	1 ST March-2008
23)	Chairman, Deptt. of Computer Science	12 January 2011
24)	Award of Meritorious Professor and grade BPS-22 by Governor	12 th May-2006
24)	of Sindh / Chancellor, University of Karachi.	(in BPS 21 and in
	of Sindif Chancellor, Oniversity of Karachi.	BPS22 from-May
		2008 - 10 January
		2008 - 10 January 2011
25)	Director / Chairman ; DCS-UBIT, University of Karachi	03 rd March 2009-10
23)	Director / Chairman , Des-Obit, University of Karacin	January 2011
26)	DEAN Faculty of Science University of Verschi	07 June 2010- 28
26)	DEAN, Faculty of Science, University of Karachi	June 2010- 28
27)	Meritorious Professor (Re-employed)	30 April 2011 – 29
21)	Mornorous Professor (Ne-employed)	April 2011 – 29
		Apili 2013
28)	Professor, College of Computer Science and Information	17 May 2013 –
20)	Systems, IoBM(HoD Actuarial Science & Risk Management)	continued
	Systems, today(thou Actualian science & Risk ivialiagement)	COMMINGU

Publications:

More than 130 publications (In the field of Statistics, Mathematics, Numerical Computing, Computer Science, Computer Graphics, Simulation, Econometrics, Operations Research, I.T. Artificial Intelligence, Risk Theory, Insurance and Soft Computing (Neuro Fuzzy Logic). (See Research Publications)

Books:

- 1) **The Y2K Problem**, 1999. Department of Computer Science, University of Karachi.
- 2) **DIGITAL CIRCUITS DESIGN USING DESIGN CENTRE SIMULATION PACKAGE.** (Published by Karachi University Press, August 2001)
- 3) **RISK THEORY AND INSURANCE: A STOCHASTIC APPROACH**. (Published by KU Press, January 2003)
- 4) COST AND MANAGEMENT, ACCOUNTING TECHNIQUES EMPLOYED THE COTTON TEXTILE (RING) SPINNING INDUSTRY OF PAKISTAN.PUBLISHED BY ICMA, PAKISTAN.
- Published in Springer (Germany; Book series on Advances in Soft Computing Analysis and Design of Intelligent Systems Using Fuzzy Logic and Soft Computing, Advances in Soft computing 41, Springer Verlag, (Edited by Merlin et al) Springer Verlag, Germany. (2007). Aqil Burney S. M. and Jilani T. A. (2007), M-Factor High Order Fuzzy Time Series Forecasting for Road Accident Data, in IEEE-IFSA, 18-21 June, Cancun- Mexico. Published in Analysis and Design of Intelligent Systems Using Fuzzy Logic and Soft Computing, Advances in Soft Computing, 41, Springer-Verlag.
- Published in Springer Verlag's (Germany) Book series on Advances in soft computing. "Theoretical Advances and applications of Fuzzy Logic and Soft Computing, advances in Soft Computing 42. Springer Verlag. Aqil Burney S. M. and Jilani T. A. and (2007), New Method of Learning and Knowledge Management in Type-I Fuzzy Neural Networks, Accepted in IEEE-IFSA, 18-21 June, World Congress, Cancun-Mexico. Published in Theoretical Advances and Applications of Fuzzy Logic and Soft Computing; Advances in Soft Computing, 42, Springer-Verlag.
- 7) S.M. Aqil Burney, Nadeem Mahmood (2011), TEMPORAL AND FUZZY RELATIONAL DATABASES, Lambert Publishers GERMANY.
- 8) S.M. Aqil Burney, Syed Akhtar Raza, Time Series Analysis of High Speed Wireless Networks, (2011) Lambert Academic Publishing GERMANY.
- 9) S.M.Aqil Burney Author, M Sadiq Ali Khan, Recent Trends in Intrusion Detection System & Network Monitoring: A Statistical Modeling Approach 3-Tier Network Intrusion Detection Model. Publisher: LAP LAMBERT Academic Publishing (January 11, 2012). ISBN-10: 3847338323 ISBN-13: 978-3847338321.
- 10) Proceedings of 2009 International Conference on Computer Engineering and Applications (ICCEA 2009). Authors:S.M. Aqil Burney, Vanithamani Saravanan, Ying Xie Publisher: World Academic Union Ltd. International, conference, proceedings.

Membership of Professional Organizations:

- Professional Networking Chair (International Webmasters Association, Pakistan Chapter) 1997-98
- 2) American Statistical Association (USA) 1979-1994
- 3) Royal Statistical Society (UK) Up to 2010
- 4) Pakistan Computer Society
- 5) IEEE-CS (USA) Continued
- 6) ACM (USA) Continued

Membership of Academic Forums: (2000 till date)

- 1) Member Academic Council, Karachi University (1994 2011)
- 2) Member Board of Studies, Sir Syed University of Engineering & Technology, Karachi.
- 3) Member Board of Studies as Expert, Computer Science, Shah Abdul Latif University, Sindh.
- 4) Member Board of Studies as Expert, Institute of Information Technology, University of Sindh, Jamshoro. (2000 till date)
- 5) Member of Experts Committee for National Curriculum Revision Committee (NCRC) on the subject of Computer Science (1998), 2004 (HEC).
- 6) Member, Board of Studies, Department of Computer Science, University of Baluchistan.
- 7) Member, Board of Studies, Deptt. of Statistics, University of Karachi.
- 8) Elected member, Board of Governors by Academic Council, University of Karachi for Institute in Islamabad affiliated with University of Karachi.
- 9) Member Board of Governors, Umear Basha Institute of Information Technology, University of Karachi. (Nominated by Vice Chancellor University of Karachi)
- 10) Member Sindh IT Board
- 11) Chair, CS/IT Curriculum development team for Sindh IT Board
- 12) Member, Curriculum Development Team 2004,2008, HEC on CS/IT.
- 13) Member, Board of Governors Sadiq Foundation Nowshero Feroz Sindh.
- 14) Member, Board of Studies, IBA, Sukkur, Sindh.
- 15) Member National Computing Education Accriditation Council, HEC Pakistan.

Awards

- 1) Performance Shield from PAF KIET in recognition of necessary help and guidance for establishing the Institute(Sept `00)
- 2) Award for the Best Work in IT & Statistics by ISOSS (Islamic Society for Statistical Sciences)
- 3) NCR IT Excellence Award for IT Educationalist of year 2002(Awarded in January 2003)
- 4) Shield Awarded by the Vice Chancellor, University of Karachi on the completion of project High Speed Fiber Based LAN with Wireless Computing Support project at UoK.
- 5) Shield Awarded by University of Karachi in 2012 considerable services and work esp. Faculty of Science. Etc.

Supervised Software Development Teams

- 1) Supervised teams from Deptt. of Computer Science, for SEARC 1994, XIII South East Asia, Regional Computer Conference at Sheraton Hotel, November 27-30, 1994
- 2) Supervised Teams for Dr. A.Q. Khan Software Competition from 1995-99. Teams won many prizes.
- 3) Supervised a Software Project for the Blind "Roshni" which guided special children to read Won special prize at Dr. A.Q. Khan Software Competition 2000. The project also included development of a printer, which could print in Brail.
- 4) Supervised many such projects 2002-2008.

Special Assignment by Governor Sindh & Chancellor of Universities of Sindh:

1) Acted as co-coordinator for Unified Curriculum for Computer Science/IT for the Universities of Sindh. (August 1997-March 1998).

Research Supervision: (Ph.D candidates)

NAME	YEAR OF REG / DEGREE	TITLE	SUBJECT	STATUS
Dr. Akhtar Raza	(2004) (M.Phil / Ph.D.) UNIVERSITY OF KARACHI	Time series models for management of computing infrastructure and resources for forecasting and control	Computer Science	COMPLETED Ph.D. degree Awarded (2011)
Dr. Syed Asif Ali	(M.Phil / Ph.D.) UNIVERSITY OF KARACHI	Artificial Intelligence techniques in Special Education using Information Technology	Computer Science	COMPLETED Ph.D. degree Awarded (2011)
Dr. M. Zamin Ali Khan	2008 (PhD) UNIVERSITY OF KARACHI	Statistical approach to design analog VLSI / low power low noise CMOS amplifier for wireless application	Computer Science	COMPLETED Ph.D. degree Awarded (2011)
Dr. M. Sadiq Ali Khan	(2006) M.Phil / Ph.D.) UNIVERSITY OF KARACHI	Recent trends in computer intrusion detection and network monitoring: A statistical modeling approach	Computer Science	COMPLETED Ph.D. degree Awarded (2011)
Dr. Nadeem Mahmood	(2003) (M.Phil / Ph.D.) UNIVERSITY OF KARACHI	Applications of Temporal Logic in RDBMS	Computer Science	COMPLETED Ph.D. degree Awarded (2010)
Dr. Tahseen Jilani	(2003) (M.Phil / Ph.D.) UNIVERSITY OF KARACHI	Soft computing applications in Actuarial Science	Computer Science	COMPLETED Ph.D. degree Awarded (2007)
Maj. Dr. Afzal Saleemi	(2002) (M.Phil / Ph.D.) UNIVERSITY OF KARACHI	New trends in smoothing and filtering of temporal data using information technology	Computer Science	COMPLETED Ph.D. degree Awarded (2006)
Dr. Noor Ahmed Sheikh	(1991) University of Sindh, Jamshoro, Pakistan.	Some Work On Machine Repair Problem (Theory of Queues)	Mathematics (Operations Management)	COMPLETED Ph.D degree awarded (1996)

	(2004)	Statistical	Computer Science	Thesis Submitted
Mr. Badar Sami	(M.Phil /	techniques in Text	1	
	Ph.D.)	Mining of Urdu		
	UNIVERSITY OF	information		
	KARACHI	retrieval systems		
	2002 (M Dbil /	Software		
Mr. Hussain	2003 (M.Phil./ Ph.D.)	configuration management with		
Saleem	UNIVERSITY OF	emphasis on trace	Computer Science	Final stages
Saicem	KARACHI	dependency		
	Krikrich	analysis		
		Developing an		
		Information and		
		Communication		
	2007 (M.DI.:1 /	Technology		
	2007 (M.Phil./	Acceptance Model		
Mr. Syed Asim Ali	Ph.D.) UNIVERSITY OF	in the context of	Computer Science	Final stages
-	KARACHI	Social	_	_
	KAKACII	Environment and		
		measuring the		
		Performance using		
		Diffusion Models		
		Soft Computing		
		Algorithms		
		(SCAS) &		
	2000 252	REGION BASED		
Dr. Humera Tariq	2008 (M.S./	ALGORITHMS		COMPLETED
	Ph.D.) UNIVERSITY OF	(RBAS) FOR BIO MEDICAL	Computer Science	Ph.D degree
	KARACHI	IMAGE		awarded (2015)
	KAKACIII	SEGMINATION		
		A		
		COMPARATIVE		
		STUDY		
		Intelligent		
	2008 (M.S./ Ph.D.) UNIVERSITY OF KARACHI	technologies using		
		ICT and Soft		
Mr. Zain Abbas		Computing for	Computer Science	Thesis Submitted
		healthcare		
		management in		
		Pakistan		
Dr. Qamar-ul-	2008 (M.S./ Ph.D.)	Soft computing		COMPLETED
		approach in forensics: An	Computer Science	COMPLETED Ph D degree
Arifeen	UNIVERSITY OF	intelligent	Computer Science	Ph.D degree awarded (2015)
	KARACHI	approach		awarucu (2013)
		Application of ICT		
Mr. Jawed Nasim	2009 (M.S./ Ph.D.)	in Agricultural		
		science: A	Computer Science	Final Stages
	UNIVERSITY OF	Pakistan case	<u> </u>	, , , , , , , , , , , , , , , , , , ,
	KARACHI	study		

- 1) MS thesis on Different Networking Paradigms at SSUET.(MS programme in Computer Engineering with specialization Networking). At present supervising MS (CS) and MS(scientific Computing) at IoBM in 2014-16 continue.
- 2) BS theses in the following domains: Data Mining, AI, ANN, VoIP, Bayesian Networks, Semiotics, Data Warehousing & DSS, Object Oriented Databases, Parallel Virtual Machines.(2002-Continued) List of thesis available.(More than 50 thesis 2003-2008)

- 3) More than 100 M.Sc./MCS Software & Modeling Projects related with Operations Research, Statistics, MIS, Computer Graphics, OPP, Software Engineering (1994-2003)
- 4) Currently supervising 10 candidates for PhD in Temporal Databases & Data Mining Algorithms and Forecasting Using Artificial Neural Networks. Also supervising one M.Phil candidate in Software Development using Java for Data Mining & Similarity Analysis (Queries) List of Ph.D students available on www.drburney.net
- 5) HEC approved Supervisor of Statistics and Computer Science.
- 6) Started MS/PhD program with coursework in 2009at UoK. Two batches have completed their coursework degrees awarded upto 2016,table given blow.

Seminars/Lectures at University of Karachi (1994-till date)

Arranged a series of Seminars on DBMS, MIS, Computer Graphics, Office Automation, Advance Computing Systems, Clients/Server Technology, OOP, Networking, Data Warehousing, VoIP, Wireless Computing, Software Configuration Management(SCM), AI, ANN, Data Mining, Fuzzy Logic, Queues, Software Engineering etc. Arranged more than 50 invited lectures during 1994-1998. 2001-02 (For University Staff), Summer Programme, 2002-03 (Network and Web Development programmes)2005-08 (Training for University Teachers), Cyber Crimes & Associated Law, Soft Computing. Information System Control and Audit (Oct 2009)Many Presentations available on my web:www.drburney.net and some will be available on CD.

Administrative Responsibilities & Projects

- 1) Registrar, University of Karachi (Oct 2001 Sep 2002)
- 2) Senior Warden Boys Hostel, University of Karachi (1988 –1994)
- 3) **Provost, Boys Hostel, University of Karachi** (22 Oct, 1994 9 February 1999)
- 4) Chairman Department of Computer Science University of Karachi (05 May,1994 to 13 September 2000) and (2008- 12 January 2011).
- 5) **Project Director of the Project "Development of Department of Computer Science UoK.**(2002 to 2005). (Sponsored by Ministry of Science and Technology)
- 6) Project Director Umaer Basha Institute of Information Technology(UBIT), UoK 2002 to 2008)
- 7) Project Director High Speed Fiber Optics Network with Wireless Support at UoK.(2002-2006).
- 8) Project Director High Speed Fiber Optics Network with Wireless Support at UoK.(2nd phase).
- 9) **Project Director for Management University of Karachi website <u>www.uok.edu.pk</u> (2002-2006). Founding Director, Main Communication Network.**
- 10) Project Supervisor For University Industry Coordination in ICT, Project started in 2010 and in progress for developing products (software) for mobile communication.

Resource Person

- 1) At National Institute of Public Administration (NIPA) 1990-95 for teaching Operations Research, Statistics and Packages.
- 2) At Cabinet Secretariat (Karachi) 1989, 1990, 1993, 1997 for teaching Operations Research, Simulation & Modeling.
- 3) IT/CS and its importance arranged by Computer Friendship Society (of JAPAN) at AVARI Towers in 1996 for college teachers and principals.
- 4) Internet & its uses with Demo at AVARI Towers in 1997 by Computer Friendship Society.
- 5) Hamdard University: Lecture of AI with Application at Hotel Regent Plaza, Karachi (1999).
- 6) FAST, Karachi: "Stochastic Process with Application in Computer Science & Insurance" (1994).
- 7) FAST Lahore: IT/CS Education Discussion Group (1998) on IT education in Pakistan.
- 8) Governor House: CS/IT Curriculum in Universities of Sindh presentation at Governor House and a report was submitted (Report available on request).

- 9) Degree College Malir Cant.: "Teaching Computer Science & Curriculum" at college level. (1999).
- 10) I.B.A., Karachi: Invited lecture "Strategies for Developing Curriculum" (1997).
- 11) Bazm-e-Sciency Adab Karachi: Y2K, Computer & related problems. Dr. Saleem-uz-Zaman Siddiqui Science Center, Karachi (1999).
- 12) Memorial lecture at Institute of Mathematics and Computer Science, Sindh University.
- 13) Dr. M.N. Talpur Memorial lecture on "Application on Stochastic Process in Computer Science and Insurance Business". Institute of Mathematics & Computer Science, Sindh University.
- 14) Member Selection Board of Computer System, Sir Syed University, Karachi.
- 15) Member Board of Studies & Selection Board on Computer Science, Shah Abdul Latif University, Khairpur.
- 16) Member Board of Studies, Institute of Information Technology, Sindh University.(continued)
- 17) Govt. Ministry of Education (Curriculum Wing) Member National Evaluation Committee on the subject of Computer Science multiple textbooks and teachers guide (1995).
- 18) Computer Society of Pakistan seminar on Urdu Software Development Presided the 2nd session on invitation of CSP and was awarded shield of the Society (September 25, 1999).
- 19) Allama Iqbal Open University for invited for lecture on "Modernization of Education using IT" at Silver Jubilee Ceremony of AIOU, Islamabad, November 16, 1999. (A multimedia presentation).
- 20) Member National Curriculum Committee for CS,IT,Software Engineering 2004,HEC,Islamabad.
- 21) Member National Curriculum Committee for CS/IT/Software Committee 2008-2009.Convener Software Engineering Curriculum committee held at HEC Karachi, April 7-9,2009.
- 22) Invited Speaker, (Singapore, ICCSIT, www.iccsit.org), NUST, Karachi, LUMS, Lahore, Istanbul, Turkey and various other places, conferences seminars. See www.drburney.net.
- 23) Invited Professor to teach Research Methods to MS/Ph.D. students at IBA Sukkur, (2009-2010).
- 24) Articles published in leading newspapers and interviews conducted by many TV channels, newspapers and magazines.
- 25) Invited Lecture at Jinnah Postgraduate Medical Centre Karachi "every Life Counts" Plenary session 49th Annual Medical Symposium. (see on the web youtube link http://www.youtube.com/watch?v=ecW6AZEOweA.
- 26) Member Board of Studies, Department of Computer Science, CBM. Also delivered invited lectures since 2005 or so.

Research Publications

- 2015 Aqil Burney and Humera Tariq (2015), Low Level Segmentation of Brain MR Slices and Quantification Challenges, NCMCS'15.
 - Aqil Burney and Zain Abbas (2015) Applications of Rough Sets in Health Sciences and Disease Diagnosis. Recent Researches in Applied Computer Science. Proceedings of the 15th International Conference on Applied Computer Science (ACS'15)Konya ,at Selcuk University ,Konya ,Turkey May 20-22 arranged by WSEAS ,published in Recent Advances in Computer Engineering Series 30, pp 153 161.(Extended version soon in journal).
- 2014 Maqsood, A. and Burney, S. (2014) Extracting the Influential Commodities in Stochastic Model of Simple Laspeyre Price Index Numbers with AR(2) Errors. Open Journal of Statistics, 4, 220-229.
 - Burney, S. and Maqsood, A. (2014) LONG MEMORY FORECASTING: AN APPLICATION TO KSE SHARE INDEX . Pak. J. Statist. 2014 Vol. 30(3), 333-344
 - Humera Tariq and Aqil S M Burney, K-Means Cluster Analysis for Image Segmentation, International Journal of Computer Applications, Volume 96– No.4, June 2014. Published by Foundation of Computer Science, New York, USA.
 - Burney, S. and Maqsood, A. (2014) Influential Observations in Stochastic Model of Divisia Index Numbers with AR(1) Errors. Applied Mathematics, 5, 975-982.
- 2013 Nadeem Mahmood, Aqil Burney, Zain Abbas, Kashif Rizwan, Data and Knowledge Management in Designing Healthcare Information Systems, International Journal of

- Computer Applications. July 2013; 50(2):34-39.
- Prof. Dr. S.M. Aqil Burney, Arfa Maqsood, Extending the Stochastic Approach to Paasches Price Index Numbers, Pak. j. eng. technol. sci. Volume 3, No 1, 2013, 1-10.
- A. Burney, Z. Abbas, N. Mahmood and Q. Arifeen, "Prospects for Mobile Health in Pakistan and Other Developing Countries," Advances in Internet of Things, Vol. 3 No. 2A, 2013, pp. 27-32. doi: 10.4236/ait.2013.32A004.
- Aqil Burney, Zain Abbas, Nadeem Mahmood, and Qamar-ul-Arifeen (2013), Prospects for Mobile Health in Pakistan and other Developing Countries, Advances in Internet of Things, Special Issue-The Future of IOT on Patient-Centered Healthcare and Smart Living. (Accepted for Publication)
- Humera Tariq, and Aqil S M Burney, Contour Extraction of Femur and Tibia Condyles on Plain Anteroposterior (AP) Radiograph, International Journal of Computer Applications 52(15):26-30, August 2012. Published by Foundation of Computer Science, New York, USA.
 - Aqil Burney, Zain Abbas, Nadeem Mahmood, and Qamar ul Arifeen (2012), Application of Fuzzy Rough Temporal approach in Patient Data Management (FRT-PDM), International Journal of Computers, Issue 3, Volume 6, pp. 149-157.
 - Aqil Burney, Nadeem Mahmood, Asim Ali, Kashif Rizwan, and SAK Bari (2012), Fuzzy-temporal database ontology and relational database model, pp. 573-577, FSKD 2012, Chonqing China.
 - Aqil Burney, Nadeem Mahmood, Zain Abbas, and Kashif Rizwan (2012), Data and Knowledge Management in Designing Healthcare Information Systems, International Journal of Computer Applications, July 2012. Published by Foundation of Computer Science, New York, USA.
 - Aqil Burney, Badar Sami, Nadeem Mahmood, Zain Abbas, and Kashif Rizwan (2012), Urdu Text Summarizer using Sentence Weight Algorithm for Word Processors, International Journal of Computer Applications 46(19): 38-45, May 2012. Published by Foundation of Computer Science, New York, USA.
 - Mahmood N., Burney S.M.A., Ahsan K. (2012), Generic Temporal and Fuzzy Ontological Framework (GTFOF) for Developing Temporal-Fuzzy Database Model for Managing Patient's Data, Journal of Universal Computer Science, vol. 18, no. 2, pp. 177-193
 - SMA Aqil Burney, N Mahmood, K Rizwan, and U Amjad (2012), A Generic Approach for Team Selection in Multi– player Games using Genetic Algorithm, International Journal of Computer Application (0975-8887) Volume 40– No.17, February 2012, Feb 2012, Published By Foundation of Computer Science
 - Jilani T. A., Burney S.M.A., Amjad U. (2012), A Particle Swarm Intelligence based Fuzzy Time Series Forecasting Model, International Journal of Computer Applications, Vol. 38 No.10, pp. 47-52
 - Aqil Burney, Nadeem Mahmood, Zain Abbas(2012), Advances in Fuzzy Rough Temporal Databases, The 11th WSEAS International Conference on Artificial Intelligence, Knowledge Engineering and Data Base at University of Cambridge, UK, Feb. 22-24, 2012
- Aqil Burney, Sadiq Ali Khan; "Efficient FSM Techniques for IDA to Reduce the System Attacks", International Journal of Computer Applications Volume 29-No.11, September 2011. Published by Foundation of Computer Science, USA.

- 120 Aqil Burney, Tahseen Jilani; Multivariate Stochastic Model for TAIFEX and Temperature Forecasting Using Fuzzy Logical Relationships and Genetic Algorithm to be publish in International Journal.
- 119 Aqil Burney, Syed Asif Ali, Information and Communication Technology for Special Education: Application of Artificial Intelligence Techniques, Theory of Automata and Software Development for Special Education (2011) Lambert Academic Publishing GERMANY
- 118 Aqil Burney, Syed Akhtar Raza, Time Series Analysis of High Speed Wireless Networks, (2011) Lambert Academic Publishing GERMANY
- 117 Temporal and Fuzzy Relational Databases, Application of Patient Data in Health-Care Information Systems. LAMBERT ACADEMIC PUBLISHING GERMANY.
- 116 Nadeem Mahmood and S.M. Aqil Burney (2011), Advances in Fuzzy Temporal Relational Databases: A Review, WSEAS Transaction on Information Science and **Applications**
- 115 M. Zamin Khan and S.M. Aqil Burney (2011) Statistical Approach to design 1Ghz CMOS Low-Noise Amplifiers. International Journal of Computer Science Issues.
- Zamin Ali Khan ,S. M. Aqil Burney, , Jawed Naseem, Kashif Rizwan, Optimization of Power Consumption in VLSI Circuit. IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 2, March 2011 ISSN (Online): 1694-0814 www.IJCSI.org
- 113 An article on Risk Management using Soft Computing to be published (In progress).
- 2010 112 Agil Burney, S.M., Nadeem Mahmood and Kamran Ahsan(2010)TempR-PDM: A Conceptual Temporal Relational Model for Managing Patient Data. The 9th WSEAS International Conference on Artificial Intelligence, Knowledge Engineering and Data Base at University of Cambridge ,UK ,Feb. 20-22,2010.
 - 111 Aqil Burney ,S.M Nadeem Mahmood and Kamran Ahsan (2010); A Logical Temporal Relational Data Model. International journal of computer science issues, Vol.7, issue 1. No.1. pp 1-9 ISSN: 1694 -0814,
 - Agil Burney, S.M.Nadeem Mahmood and Kamran Ahsan (2010); Temp R-PDM: A Conceptual Temporal Relational Model for Managing Patient Data . In Proceeding of the 9th WSEAS International Conference on Artificial intelligence, Knowledge Engineering and Data Bases (AIKED'10) at University of Cambridge, U.K ,Feb.20 -22-2010 ,pp .237-243
 - 109 Agil Burney, Nadeem Khan Mahmood Tahseen Jilani and Hussain Saleem, 2010 WSEAS transactions on information science and applications, IISN: 1790 -0832.
 - 108 Zamin Khan" A systematic and Statistical approach to design a low noise amplifier in sub - micron CMOS technology "WMSCI 2010, OPRLANDO FLORIDA,
 - 107 Aqil Burney, Akhtar Raza Syed and Afzal SAlemi, 2010; Fast clustering of selfsimilar network traffic using wavelet, international journal of computer science issues Vol. 7 issue 3 May 2010 ISSSN 1694-0814.
 - Aqil Burney, Hussain Saleem, Nadeem Mahmood and Tahseen Jilani, 2010; Evolving Traceability management Ontology for patient data in Hospotal Environment,3rd IEEE international conference on COMPUTER SCIENCE AND INFORAMTION Technology (IEEE ICCSIT 2010) July 9-11,2010 Chengdu,

China.

- S.M. Aqil Burney, Syed Asif Ali, 2010; Conversion of Heterogeneous Education System (HeES) into Homogeneous Education System (HoES) for ease of Disables using Information Technology, International Conference on Computer Design and Applications (ICCDA 2010) (IEEE, IACSIT) June25-27, 2010, Qinhuangdao, China.
- 104 Aqil Burney, S.M. Nadeem Mahmood, Tahseen Jilani and Hussain Saleem (2010). Conceptual Fuzzy Temporal Relational Model (FTRM) for Patient Data WSEAS Transactions on Information Science and Applications, IISN 1790-0832.
- 103 Agil Burney, S.M. Nadeem Mahmood and Zain Abbas (2010). Information and Communication Technology in Healthcare Management Systems: Prospects for Developing Countries. International Journal of Computer Application (0975-8887) Volume 4-No. 2, July 2010. Published By Foundation of Computer Science.
- 102 Agil Burney and et al (2010). Feature Deduction and Ensemble Design of Parallel Neural Network for Intrusion Detection System. International Journal of Computer Science and Network Security, Vol.10, no.10, Oct.2010 (pp.259-267).
- 101 Aqil Burney and et al (2010). Network Usage Policies for Academic Institutions. International Journal of Computer Applications No.14. Vol 7. (pp6-11).
- 100 Akhtar Raza Syed, Aqil Burney S.M. and Badar Sami" Forecasting Network traffic load' using wavelet filters and seasonal Autoregressive moving average models Vol 2 no.6 Dec 2010. International Journal of Computer and Electrical Engineering.
- 99 S. Asif Ali, and S.M. Aqil Burney (2010). Conversion of Heterogeneous Education System into Homogeneous Education system. HoES for Ease of Disabled persons using information technology. International Conference on Computer Design and Applications.(ICDA 2010) Vol.2 (ppV2 298-302).
- 98 Agil Burney, S.M., Sadiq Ali Khan and Naseem(2010). Efficient Probabilistic classification Methods for NIDS. International Journal of Computer Science and Information Security. (paper ID, 1410103). Dec 2010. (ISSN, 1947-5500) Vol 8,
- 2009 97 Agil Burney, S. M., and Akhter Raza(2009) Simulation and analysis of Self-Similar Network traffic using WBFGN. Second International Conference on Environmental and Computer Science, Dubai, UAE, 28-30 Dec. 2009. IEEE Computer Society, 10662 Los Vaqueros Circle, P>O> Box 3014 Los Alamtos CA 90720-1314, USA. (ISBN 978-0-7695-3937-9.
 - 96 Aqil Burney, S.M. and Nadeem , Mand Kamran Ahsan. (2009) A Logical Temporal Relational Data Model. Published in IJCSI ISBN 1694-0814.
- 95 2008 Agil Burney S. M. and Jilani T. A. (2008), "A Refined Fuzzy Time Series Forecasting Model For Stock Market Forecasting", Physica A- vol. 387 (Statistical Mechanics with Applications), pp. 2857–2862, Elsevier Publishers.
 - 94 Agil Burney S. M. and Jilani T. A. (2008), "Multivariate Stochastic Fuzzy Forecasting Models", Expert Systems With Applications (ESWA), vol. 35, pp. 691-700, Elsevier Publishers.
 - 93 Aqil Burney S. M. and Jilani T. A. (2008), "Multiclass Bilateral-Weighted Fuzzy Support Vector Machine to Evaluate Financial Strength Credit Rating", To appear in Proceedings of IEEE-ICCSIT 2008. International Conference on Computer Science and Information Technology 2008, (ICCSIT 2008), Singapore August 29 -September 2, 2008. http://www.iccsit.org/

- 92 Aqil Burney S. M., Jilani T. A., and Ardil C. (2008), "A New Quantile Based Fuzzy Time Series Forecasting Model", International Journal of Intelligent Systems and Technologies 3;4 © www.waset.org Fall 2008, pp201-207 Conference on Computer Sciences, World Congress on Science, Engineering and Technology.
- 91 Aqil Burney S. M and Arfa Maqsood, (2008) "Study of Inflation in Pakistan Using Statistical Approach" 4th International Statistical (ISSOS), University of Gujrat, Hafiz Hayat Campus, Pakistan.(Presented to be published elsewhere).
- 90 Aqil Burney S. M and Nadeem Mahmood (2008), "Emerging Trends in Temporal Databases With Illustrations" Vol. 15, pp.201-212 ISBN 978-969-8858-04-9,4th International Statistical (ISSOS), University of Gujrat, Hafiz Hayat Campus, Pakistan
- 89 Aqil Burney S. M., Jilani T. A. and Ardil C. (2007a), "Multivariate High Order Fuzzy Time Series Forecasting for Car Road Accidents", International Journal of Computational Intelligence, 4(1), pp 15-20, ISSN 1304-2386.
 - 88 Aqil Burney S. M. and Jilani T. A. (2007), M-Factor High Order Fuzzy Time Series Forecasting for Road Accident Data, in IEEE-IFSA, 18-21 June, Cancun-Mexico. Published in Analysis and Design of Intelligent Systems Using Fuzzy Logic and Soft Computing, Advances in Soft Computing, 41, Springer-Verlag.
 - 87 Aqil Burney S. M. and Jilani T. A. and (2007), New Method of Learning and Knowledge Management in Type-I Fuzzy Neural Networks, Accepted in IEEE-IFSA, 18-21 June, World Congress, Cancun- Mexico. Published in Theoretical Advances and Applications of Fuzzy Logic and Soft Computing; Advances in Soft Computing, 42, Springer-Verlag.
 - 86 Aqil Burney S. M., Jilani T. A. and Ardil C. (2007), Fuzzy Metric approach for Fuzzy time Series Forecasting Based on Frequency Density Based Partitioning, Proceedings of World Academy of Science, Engineering and Technology vol. 23, August, ISSN 1307-6884.
 - 85 Agil Burney S.M. and Syed Akhtar Raza (2007). Monte Carlo Simulation and Prediction of Internet load using Conditional mean and unconditional variances model. Proceedings of the 9th Islamic Countries Conference on Statistical Sciences, pp. 1751-1761 ICCS-IX,12-14 Dec. 2007, Malaysia.
- 2006 84 Aqil Burney, S.M. et al, (2006), Approximate Knowledge Extraction Using Multiresolution Analysis for Type-I Fuzzy Neural Networks, published in ICEAS-2006, Islamabad, Pakistan. PP. 464-469. accessible through IEEE-Xplore, USA.
 - 83 Aqil Burney, S.M. et al, (2006), Wavelet Based SARIMA Models for Forecasting Neural Gas Demand. Business Review Vol.I, No.1, ISSN 1990-6587, IBA, Karachi-Pakistan. PP 134-139.
 - 82 Aqil Burney, S.M. and Nadeem Mahmood, (2006), A brief History of Mathematical Logic and Applications of Logic in CS/IT. Karachi University Journal of Science Vol.34(1) July 2006, PP 61-75. ISSN No.0250-5363
- 81 2005 Aqil Burney, S.M. et al, (2005), A Brief History of Logic: Application of Logic in Computer Science and Information Technology, in proc. of the National Conference on Information Technology and Applications (NCITA) April 21-22,2005, Balochistan University of Information Technology and Management Sciences, Quetta, Pakistan.
 - 80 Aqil Burney, S.M. et al. (2005), Approximate Bounded Knowledge Extraction using Type-I Fuzzy Logic, in proc. of the 5th World Enformatika Conference, WEC'05, August 26-28, 2005 in Prague, Czech Republic. ISBN: 975-98458-6-5. ISSN (e):

- 79 Aqil Burney, S.M. et al,(2005)Optimal neuronal complexity using wavelet based multiresolution analysis for Type-I fuzzy neural networks.4th WSEASInt. Conference on Computational Intelligence, Man-Machine Systems and Cybernatics, Miami Florida, USA Nov. 17-19 2005 pp 210-216.
- 2004 78 S.M.Aqil Burney; Asadullah Malik. OOS Management for Mobile Internet Services by Optimization of System Efficiency, Capacity, Production Ratio and Handoff Rate.(Report)
 - 77 Aqil Burney S. M. and Asadullah Malik (2004)Cellular Multimedia Network Management by Optimizing Efficiency ,QoS Level and Capacity.International Networking and Communication Conference 11-13th June 2004.IEEE Communication Society pp. 99-104.ISBN 0-7803-8325-7..Lahore University of management Sciences. Pakistan.
 - 76 Aqil Burney S. M. and et al.(2004)Multislot Scheduling Algorithms in ATM Networks.INCC 2004.pp.89-98.ISBN 0-7803-835-7. LUMS Lahore, Pakistan.
 - 75 S.M.Aqil Burney, Tahseen A. Jilani & Cemal Ardil(2004)Levenberg-Marquardt Algorithm for Karachi Stock Exchange Share Rate Forecasting Journal of Computational Intelligence. Canakkale University, Turkey.
- 2003 74 S.M. Aqil Burney; M.Sadiq Ali Khan; M.Khurram. Multislot Cell Scheduling Algorithm in ATM Switching Networks. Accepted and Published at IWTIT 2003 Organized by Dept. of Computer Science, International Islamic University, Islamabad.
 - 73 S.M.Aqil Burney; Adnan Manzoor; Fahad Burney. Similarities and Differences in Statistics and Data Mining. Accepted for Publication at International Workshop on Frontiers of Information Technology Islamabad Pakistan organized by COMSATS Institute of Information Technology.
 - 72 S.M.Aqil Burney; Tahseen A. Jilani Supervised Artificial Neural Network for Karachi Stock Exchange Share Rates Forecasting" Accepted at Artificial Intelligence and Neural Network Conference .Department of Computer Engineering Canakkle University, TurkeyJuly2-4,2003 TAINN-2003.
 - 71 S.M.Aqil Burney(2003) Introduction to Stochastic Processes and their Applications in Insurance and Computer Science. Dr.M.N.M. Talpur Memorial Lecture. Published by Institute of Mathematics and Computer Science University of Sindh, Jamshoro.
- 70 2002 Burney, S.M. Aqil; Naseem, M. A Comparative Study of Real Time Audio Compression Techniques based on Fourier & Wavelet Transformation. IEEE-CS Karachi Chapter Conference, 22 Dec, 2002
 - 69 Burney, S.M. Aqil; Khurram M. Perceptual Analysis Measurement System for Endto-End Network Speech Quality". Accepted for Publication at International Islamic Countries Conference on Statistical Sciences, Bahrain, March 2004, IEEE KIIT Technology.
 - 68 Burney, S.M. Aqil; Burney, Fahad; Manzoor, Adnan. Statistics and Data Mining: Similarities and differences. Accepted for Publication at International Islamic Countries Conference on Statistical Sciences, Bahrain, March 2004
- 2001 67 Burney, S.M. Aqil; Jilani, Tehseen Ahmed(2001). Artificial Neural Networks Methods of Forecasting for Karachi Stock Exchange, Dept. of Computer Science & Dept. of Statistics, University of Karachi.(Project Report Available on request)(Also

- 66 2000 Burney, S.M Aqil, Badar Sami, Altaf M., and Nasir Ali (2000). Future of IT: Parallel Virtual Machines. The First International Workshop on Distributed Computing, Communication and Applications. May 8-10, 2000 IWDCCA 2000. International Islamic University, Islamabad, DCS and (collaboration with Tokyo Institute of Technology, Japan & IEEE).
 - 65 Burney, S.M Aqil (2000). Binary Search and Cache Memory. KUTS (Report DCS UOK).
 - 64 Burney, S.M Aqil (2000). Proceedings of Workshop on Distributed Computing, Communication and Applications. Publication chair. May 8-10, 2000 IWDCCA 2000. International Islamic University, Islamabad, DCS and (collaboration with Tokyo Institute of Technology, Japan & IEEE).
 - 63 Burney, S.M. Aqil (2000). Intelligent Knowledge Management on Internet. Presented at Mathematical Conference at the Institute of Mathematics and Computer Science, University of Sind Jamshoro Sind (Nov.20-22, 2000)
- 1999 62 Burney, S.M Aqil (1999). Artificial Neural Networks and Predictive Data Mining. (to be published).(Report with Sima Ishaq DCS UOk)
 - 61 Burney, S.M Agil (1999). An Overview of Software Projects of KU-DCS. (Report to be published).
 - 60 Burney, S.M Aqil (1999). Stochastic search in artificial intelligence. Presented at ISSOS 6th Conference at Lahore, Punjab University. To be published in the proceeding. (Abstract No. 112, pp.63)
 - 59 Burney, S.M Aqil (1999). Noor-ul-Hassan and Ghulam Hussain (1999). Computer Simulated Probability Distribution of Electricity Demand Forecast for Pakistan. Accepted for publication in Pakistan Business Review (January, 2000).
 - 58 Burney, S.M Aqil (1999) and A. Mukati (1999). Route-Optimization Through Optimum Spanning Tree Method. ISSOS, 6th Conference. (Abstract 129). To be published with Algorithms for Travelers Salesman Problem Revisited (Abstract 114 ISSOS Lahore 1999).
 - 57 Burney, S.M Aqil (1999) Data Compression using Statistical Structure. (Abstract 130, ISSOS, 1999).
 - 56 Burney, S.M Aqil, Amir Ahmed Khan and Umair Ahmed (1999). Y2K: The Coming Computer Crises: An Overview with February 30, 2000 Problem. Department of Computer Science, University of Karachi 2000 (Published).
- 55 1998 Burney, S.M Aqil (1998). Exploring Computer Science and Information Technology. DAWN, Sept. 29, 1998.
 - 54 Burney, S.M Aqil., M. Altaf Mukati and N. Bari Qureshi (1998). Workshop on Microprocessor Experiments. pp. 1-60. Department of Computer Science, University of Karachi.(book)
- 1997 53 Barry, M.A., Burney, S.M Aqil and Bhatti, M.I. (1997). Optimum Influence of Initial Observations on Regression Models with AR(2) Errors. Applied Mathematics and Computation. Vol. 82, No. 1 pp. 57-65. North-Holland, U.K. (This work was partially supported by the Faculty of Science, University of Karachi).
 - 52 Burney, S.M Aqil (1997). How to buy All-in-one Modems? Computech January, 1997, pp. 13-14. Internet e-mail it@abc.khi.sdnpk.undp.org.

- Burney, S.M Aqil (1997). Your Guide to the ISDN Technology (ISDN). Computech March, 1997. Pp. 15-16. Internet e-mail it@abc.khi.sdnpk.undp.org.
- Burney, S.M Aqil (1998). Software Quality: Metrics and Models. 23rd International Nathiagali Summer College on Physics and Contemporary Needs. 02 June 04 July, 1998, Nathiagali (Poster session).
- Ghulam Hussain, Burney, S.M. Aqil and Asim Jamal (1996). Moments of Polya-Eggerberger Distribution using Finite Difference Calculus, Karachi University Journal of Science, Vol. 24(2) pp.81-84.
 - Burney, S.M Aqil (1996). Information Masters. (In Fortnightly Feature: Careerwise on 'Information Technology). Dawn Saturday, August 10, 1996.
 - Burney, S.M.Aqil (1996). Online Newspapers. Monthly Magazine Computech' July 1996, pp.17. Internet e-mail It@abc.khi.sdnpk.undp.org.
 - Burney, S.M Aqil (1996). Viruses in 32 bit Environments! Computech. September 1996. Pp.20.It@abc.khi.sdnpk.undp.org.
 - Burney, S.M. Aqil (1996). To Bridge or Not to Bridge (Networking) Computech. October 1996. Pp. 20. It@abc.khi.sdnpk.undp.org.
 - Burney, S.M. Aqil (1996). Know all Thy Protocols (Networking) Computech. November, 1996. Pp. 20 It@abc.khi.sdnpk.undp.org.
 - Burney, S.M. Aqil (1996). When the CPU Speed Fools (Benchmark) Computech. December, 1996. Pp.20. It@abc.khi.sdnpk.undp.org.
 - Burney, S.M. Aqil (1996). Temporal Software Assessment Techniques. Computer Application/Programming Section. Proceedings Vol.2: The Fifty Islamic Countries Conference on Statistical Science (pp. CP6). Faculty of Mathematics and Natural Sciences, University of Brawijava, Malang, Indonesia. (August 24-31, 1996).
 - Burney, S.M. Aqil (1996). Department of Computer Science, University of Karachi: Recent Developments. Higher Education News. Vol. XVI. No.8-9, pp.2, Aug-Sep. 1996, UGC, Islamabad.
 - Book : Burney, S.M. Aqil and M.A. Hashmi (1993) Risk Theory and Insurance : A Stochastic Approach. Monograph, University of Karachi. (Report format)
 - Sohail Barkati and Burney, S.M Aqil (1991). Biomass and Species Composition of Litoral Rocky Shore of the Karachi Coast. Sponsored by National Scientific Research and Development Board, Govt. of Pakistan, Islamabad (Through UGC)(Report and Published)
 - Burney, S.M Aqil., Ejaz Ahmed and Asim Jamal (1991). A Study on the Production, Consumption and Future Forecast. A project sponsor by Faculty of Science, University of Karachi.
 - Burney, S.M Aqil and M.A. Hashmi (1993). Claim Number Process in Insurance Business. Journal of Social Sciences and Humanities. Vol .1&2 pp. 12-22, Karachi University.
 - Book: Published by ICMA (Research Department) on Cost and Management & Accounting Techniques. Employed in the Cotton Textile (Ring) Spinning Industry of Pakistan. Author of Chapter Two "The Survey" as team member of the group. (MIS report)
- Asim Jamal Siddiqui, Burney, S.M. Agil and M. Naseem Igbal (1995). Precision of

- Unequal Probability Sampling in Finite Population. Karachi University Journal of Science, Vol. 23 (1&2) pp. 47-54.
- 34 Noor A. Shaikh, Burney, S.M. Aqil and Asif Ali G.Kazi (1995). Review of Literature on Machine Repair Problem (MRP) Sindh University Research Journal (Sci.Sr.) Vol. 27(2) pp. 109-121.
- 33 Burney, S.M. Agil and Sohail Burkati (1995). Benthic Dynamics of a Rocky Beach Macroinvertebrates - I. Diversity Indices and Biomass Assessment of Buleji, Karachi (Arabian Sea). Marine Research, 4(1): 53-61.
- 32 Barkati, S. And Burney, S.M. Aqil (1995). Benthic Dynamics of Rocky Beach Marcoinvertebrates-II. Cyclical Changes in biomass at various tidal heights at Buleji, Karachi (Arabian Sea) marine Reasearch, 4(1): 63-76.
- 31 Burney, S.M. Aqil (1995). Measures of Central Tendency in News-MCB Stock Exchange Price Index. Pp. 12-31. Developed by Vital Information Services (Pvt) Limited, Karachi.
- 30 Shaikh, Noor Ahmed, S.M. Aqil Burney and Asif Ali G. Kazi (1995). Review of Literature on Machine Repair Problem (MRP). Sindh University Research Journal (Sci.Sr.) Vol. 27 (2), pp. 109-121.
- 1994 29 Ghulam Hussain and Burney, S.M. Aqil (1994). Kolmogrov-Smirrnov Type Test statistics for the Gompertz Distribution when Parameters are unknown. (2nd) Proceeding ICSS-IV, Lahore, Pakistan. August 27-31, Vol.8. pp. 439-446. (Simulation & Modeling)
 - 28 Ghulam Hussain and Burney, S.M.Aqil (1994). Kolmogrov-Smirnov Type Test for the Gompertz Distribution when Parameters are unknown (first). Proceeding Fifth Statistics Seminar-1994. Pp. 163-169. Department of Statistics, University of Karachi. (Simulation & Modeling.
 - 27 S.E. Ahmed, S.M. Khan and Burney, S.M. Aqil (1994). Estimating Function of a Parameter. Industrial Mathematics, The Journal of the Industrial Mathematics Society, USA, Vol. 44. Part.
 - 26 M.A. Hashmi and Burney, S.M. Aqil (1994). Reinsurance Treaties: A statistical Approach Proceedings Fifth Statistics Seminar, Department of Statistics, University of Karachi, pp. 123-134.
 - 25 Noor Ahmed Shaikh and Burney, S.M. Aqil (1994). Empirical Queuing Model: A study of Countess Dufferein Hospital Record of Maternity Patients. Journal of Social Sciences, University of Sindh, Jamshoro.
 - 24 Burney, S.M. Aqil (1994). Computer Science at School Level. Report on: Computer Education Curriculum Development Workshop. Section 2.3. Orangi Pilot Project. 18th, 19th, Sept., 1994.
 - 23 Burney, S.M. Agil., Noor A. Shaikh and Asif Ali G. Kazi (1994). A Optimal Profit Policy for the M/M/m Machine Interference Model. Journal of Science Res. Vol. XXIII, No. 1 & 2, pp. 125-142. (University of Punjab). (O.R. Simulation & Modeling)
- 1993 22 Burney, S.M. Aqil., M.A.Hashmi and A.J.Siddiqui (1993). Claim Number Process in Insurance Business. Journal of Social Science and Humanities, Vol. 1 & 2, pp.12-22, Karachi University.
 - 21 Burney, S.M. Aqil (1993). Applications of Stochastic Process in Computer Science and Risk Theory & Insurance. Invited Lectures through UGC (pp. 1-30) Institute of

Mathematics & Computer Science, Sindh University.

- 20 1992 Burney, S.M. Aqil (1992). "Comparative Study Of Estimation Methods Of The Parameters of VMA(1) VIA Simulation And Construction Of Monte-Carlo Confidence Intervals". Journal of Islamic Academy of Sciences 5;3 158-170,1992 ISBN: 1016-3360(Statistics) Ankara, Turkey
 - 19 Burney, S.M. Aqil, S.A. Akhtar and Shagufta Aslam (1992). Probabilistic Approach to Life Tables of Pakistan, Karachi University Journal of Science. Vol. 20, pp. 91-100, University of Karachi, Pakistan.
 - 18 Burney, S.M. Aqil (1992). Computing Exact Likelihood Function of Vector MA(1) Model. Pakistan Journal of Statistics Vol. 8(1), 51-59, Lahore Pakistan. (Developing algorithm, analysis and comparison with implementation).
 - 17 Ghulam Hussain and Burney, S.M. Aqil (1992). Kolmogrov-Simernov Type Test for Pareto Distribution when Parameters are unknown. Proceeding of Third Islamic Countries Conference on Statistical Sciences at Rabat Morocco (August 25-29, 1992) Vol. V, pp. 255-260. Editor Dr. Munir Ahmed, ICCS, Awami Complex, Usman Block, New Garden Town, Lahore, Pakistan. (Computer Simulation & Modeling on VAX 2000 machine).
- 1991 16 Burney, S.M. Aqil with co-authors (1991). Linear Estimation of the Standard Deviation and their effect on the Analysis of Means, Karachi University Journal of Science, 19(1&2) pp.45-50.
 - 15 Ahmed, F., and Burney, S.M. Aqil (1991). Monthly Average Daily Global Bean and Diffused Solar Radiation and its Correlation with Hours of Bright Sunshine for Karachi, Pakistan. Data Bank, Renewable Energy, Vol. 1, No. 1, 115-118. Pergman Press Great Britain.
 - 14 Khan, M.F. Hayat and Burney, S.M. Aqil (1991). Proximate Determinant of Fertility & Stochastic Model for Analysis of Fertility Data - A Study Proposal. Proceeding of Population and Development Seminar. pp. 239-260. Institute of Population Studies, University of Karachi-Pakistan.
- 13 1990 Burney, S.M. Aqil (1990). Estimation Methods for MA(q) Model. Riazi, Journal of Karachi Mathematics Association (ISSN 0255-7568) pp. 1-12.
 - 12 Hashmi, M.A., Burney, S.M. Aqil and Hussain, G. (1990). Approximating Accumulated Claim Distribution Using Lagurre Polynomials. Pakistan Journal of Statistics. 6(1) pp. 85-92.
 - 11 Burney, S.M. Aqil, Hussain, G. and E. Ahmed (1990). On the Claim Distribution in Insurance. Karachi University Journal of Science. 18 (1 & 2) pp. 61-70.
 - 10 Ahmed, F., and Burney, S.M. Aqil and S. Hussain (1990). Diffused Solar Radiation Estimates from Sunshine Hours & Clearness Index for Karachi Pakistan Energy. Conservation Management Vol. 30, No. 4, pp. 439-447. Pergamon Press, N.Y.
 - 9 Burney, S.M. Aqil (1990). Methods for Approximating Accumulated Claims Distribution, Journal of Islamic Academy of Sciences 3:4, pp 292-297. Turkey.
- 1989 8 Burney, S.M. Aqil (1989). Simulation of Systems. Application of Mathematics : First Proceedings of UNESCO Regional Workshop. pp. 19-33. Department of Mathematics, Islamia University Bahawalpur. Ed.
- 7 1988 Burney, S.M. Aqil and M.A. Hashmi (1987/88). Stochastic Modeling of Insurance Business. Journal of Social Sciences and Humanities, 1 & 2 pp. 69-70.
- 1983 6 Burney, S.M. Aqil and J.S. Siddiqui (1983). Production of Marine Fish in Pakistan.

- Proceedings of National Seminar on Statistical Techniques for Under-Developed Areas, pp 61-63. Pakistan Statistical Association, June 4-6, 1983
- Burney, S.M. Aqil (1983). Some Measures of Risk. Al Zia Statistical Journal 28-29. Institute of Statistics, University of the Punjab, Lahore, Pakistan.
- Burney, S.M. Aqil (1982). Statistical Methods Used in Bioavailability Studies. Workshop on Bioavailability of Pharmaceuticals, pp. 34-35. Faculty of Pharmacy, University of Karachi. This work also presented during Second Statistics Seminar (1982). Department of Statistics with some changes under heading "Use Statistical Techniques in Bio-Pharmaceutics"
- Burney, S.M. Aqil (1981). Nazaria-i-Ihtimal oor Zini Amaliate (urdu). Theory of Probability and Stochastic Process, Jadid Science 21, No. 2,3 pp.37-44.
 - Burney, S.M. Aqil and Ghulam Hussain (1981). Finite Difference Calculus and Moments of Some Discrete Probability Distributions. Karachi University Journal of Science. 9(1&2) 33-40.
- Burney, S.M. Aqil (1980). Teaching of Queuing Theory. Proceedings, First Statistics Seminar, Department of Statistics, University of Karachi. pP 26-36.