



Dr. Muhammad Shahab Siddiqui

Personality Description

I am and like to be a Researcher and Professional. Enjoying working at challenging and cooperative environment. Being a good team player and can work alone as well. Being an organized person, like to see projects and research to be well organized and targeted. Being affiliated to different professional institutions satisfies my thirst of research. Having experience of more than 18 years of teaching and software development.

Education

2005-2013 **GSESIT, FEST, Hamdard University** Karachi

- **Ph.D., Computer Science**

Thesis Title: “**Community Algorithm – Classification of users and their roles in a community by their Level of Interaction**”

2004-2005 **CEWS, University of Karachi** Karachi

- **M.A., Women Studies**

Thesis Title: “**Female Executives – How strong are they in Decision Making?**”

1992-1999 **FAST ICS** Karachi

- **M.C.S., Computer Science (1996-99)**

- **B.C.S., Computer Science (1992-95)**

1990-1991 **Govt. Dehli Science College** Karachi

- **H.S.C., Pre-engineering group**

1988-1989 **Saint Judes' High School** Karachi

- **S.S.C., Science group**

Funded Projects

1. GEP Grant 2014/007-B/222, Asia Foundation, Aurat Foundation, “**Empowering Women with Information Technology Skills**”, Funding Amount **US \$107,000**

2. IEEE EPICS, “**Analytical Application for Baseline Survey**”, Funding Amount **US \$3,000**

**Conference
Session Chair**

1. Session Chair, in IEEE SCONEST 2016, Hamdard University, Karachi, December 14-15, 2016
2. Session Chair, in ICCMS 2017, Sukkur IBA, February 25-26, 2017
3. Technical and Session Co-Chair, in IEEE ICIEECT 2017, Indus University, Karachi, April 05-07, 2017

**Work Experience
(Academia)**

February 2015–todate **Jinnah University for Women** Karachi

Visiting Faculty Member (February 2015 – March 2015)

Professor (March 2015 – Todate)

- Member of **Board of Studies, Board of Faculty, BASR and Academic Council**
- Taught **Artificial Intelligence, Computer Graphics, Software Requirement Engineering, Programming Fundamentals and Introduction to Computer** courses to **BS (CS) and BS (SE) Final Year**

- Supervising **BS (CS) and BS (SE) Final Year Projects**

Chairperson, CS&IT Dept (March 2015 – November 2016)

- Managing a department of **20+ female faculty members** and **450+ female students**
- Chairperson of **Board of Studies** of CS&IT department
- Member of **Board of Faculty** and **Academic Council**

Dean, Faculty of Science (August 2015 – Todate)

- Managing the faculty of **80+ female faculty members** and **2,000+ female students**
- Chairperson of **Board of Faculty** of Science
- Member of **BASR and Academic Council**
- Taught **Bio-Informatics** course in **Biochemistry** department

Chairperson, Zoology Dept (May 2017 – October 2017)

- Managing a department of **7 female faculty members (including 5 PhD Zoology)** and **200+ female students**
- Chairperson of **Board of Studies** of Zoology department
- Member of **Board of Faculty** and **Academic Council**

August 2007–March 2015 **HIET, FEST, Hamdard University** Karachi

Visiting Faculty Member (August 2007 – February 2011)

Assistant Professor (March 2011 – November 2014)

Associate Professor (December 2014 – March 2015)

- Member **Departmental Research Committee, Board of Studies and Board of Faculty**
- **GEC member** of PhD Scholars
- Taught **Software Engineering** course by Software Engineering, Principles and Practice – Roger S. Pressmen (5 times)
- Taught **Computer Graphics** course by Computer Graphics, Principles and Practice – Foley, van Dam, Feiner and Hughes (5 times)
- Taught **Artificial Intelligence** course (5 times)
- Taught **Data Structures** course (2 times)
- Taught **Database Management System** course (2 times)
- Taught **Compiler Construction** course
- Taught **Computer Programming** course
- Taught **Technical Report Writing** course
- Taught **Object Oriented Programming** course by Programming in C++ – Robert Laforre
- Taught **Analysis and Design of Algorithms** course by Introduction to Algorithms – Thomas H. Cormen
- Supervised **BS (CS) Final Year Projects**

Sept. 2000 – Feb. 2011 **GSESIT, FEST, Hamdard University Karachi**

Visiting Faculty Member (Sept 2000 – Jan 2001) (Sept 2016 – Jan 2017)

Assistant Professor (February 2001– February 2011)

- Taught **Software Engineering** course by Software Engineering, Principles and Practice – Roger S. Pressmen (6 times)
- Taught **Operating Systems** course by Operating Systems – Andrew S. Tanenbaum (6 times)
- Taught **Graphics Programming** course by Computer Graphics, Principles and Practice – Foley, van Dam, Feiner and Hughes (4 times)
- Taught **Software Project Management** course by Software Project Management – Walker Royce (2 times)
- Taught **Object Oriented Programming and Programming**

in C++ course by Programming in C++ – Robert Laforre (2 times each)

- Taught **Advance Topics of Software Engineering** and **Special Topics of Software Engineering** courses (2 times each)
- Taught **Information System Management in Practice, Advanced Software Engineering** and **Artificial Intelligence** courses
- Taught **Introduction to Informatics** course from Computer and Information Systems, 5th Edition by Hutchinson and Sawyer
- Taught **Algorithm Design** and **Advanced Programming and Algorithm** course by Introduction to Algorithms – Thomas H. Cormen
- Taught **Expert Systems** course by Expert Systems and Applied Artificial Intelligence – Efraim Turban
- Conducting **seminars** on Software Engineering and Advance Topics of Software Engineering
- Supervised number of **MS (IT) and BS (MIS) Final Projects/Thesis**

Oct. 2000–Feb. 2001 **Usman Institute of Technology** Karachi
Visiting Faculty Member

- Taught **Software Engineering-I** course by Software Engineering, Principles and Practice – Roger S. Pressmen
- Conducting workshops on different CASE tools and development packages
- Managed different course projects

Sept. 2000–Jan. 2001 **KASB Institute of Technology** Karachi
Visiting Faculty Member

- Taught **Computer Concepts** course from Computer and Information Systems, 5th Edition by Hutchinson and Sawyer
- Managed presentations and group tasks

August 2000–Jan. 2002 **FAST ICS (NUCES)** Karachi

August 2008–Jan. 2009 **FAST ICS (NUCES)** Karachi

Visiting Faculty Member

- Taught **Computer Graphics** course by Computer Graphics, Principles and Practice – Foley, van Dam, Feiner and Hughes (5 times)
- Managed different course projects, research papers and seminars
- Conducted workshop on **Flash, Adobe PhotoShop, Adobe Illustrator, Macromedia Dream Weaver**, and other Graphics tools
- Supervised two **Final Year Projects** of **BS (CS)** and **one Project of MS (SPM)**

Feb. 2000–June 2000 **College of Management & Info. Tech.**
Karachi

Visiting Faculty Member

- Taught **Computer Graphics** course by Computer Graphics - F.S. Hill, Jr.
- Took **Labs** to explore tools like AutoCAD, Adobe PhotoShop
- Conducted **workshop** on graphic JAVA - Mastering the AWT Class

Nov. 1997–July 2000 Millennium Software (Pvt) Limited Karachi

Work Experience (Industry)

Executive Software Engineer

- Involve in the designing and development of **Enterprise Resource Planning System** for **Habib Oil Mills, Pakistan** using the development platform of **Oracle 8.0** and **Developer/2000 (Forms 6.0, Reports 6.0)**. The Sub Systems in which I was involved were Human Resources, Payroll, Financials, Inventory, Depreciation, and Medical
- Involved in the designing and development of **MSL Human Resources System** including Personnel, Payroll, Income Tax, Provident Fund, Pension, Gratuity, and other Subsystems using the development platform of **Oracle 7.0** and **Developer/2000 (Forms 4.5/5.0, Reports 2.5/3.0)**
- **Developed Password Generator** for **WebNet Pakistan (ISP)** in C/C++
- Completed **Visual C++ Project - BCAST** for **US Client**. Mainly comprise of Screen Capturing, Broadcasting,

Compression and Decompression b/w active and passive users

- Involved in **Networking** of the using Windows NT at server end and Windows 95/98/NT WS at client end
- Completion of following **Y2K Projects** as a **Team Leader**:
- **Hoechst – AgrEvo** ten Applications in RPG/400 and RPG II
- **JDA Factory Card** Outlet in RPG/400
- Ugly Duckling from **KPMG Chicago** - RPG/400 & RPGLE
- **General Ledger System** in COBOL
- Two other Mainframe Projects in COBOL
- Trained on **Micro Focus Year 2000** tools (Revolve/2000, Smart-Find/2000 and Workbench/2000 including CICS, IMS, SQL, and DB2) at Global InfoTech

May 1997–Oct. 1997 Prudential Commercial Bank Limited Karachi

Officer Grade III

- Maintenance of **Pioneer International Banking Application System's (PIBAS)** Banking Software
- Development and maintenance of **General Ledger Software System** used for 10 Group Companies and was developed in-house
- Maintenance and handling of **Kutub Navees Library System** for Rahmatul-lil-A'lameen Research Center & Reference Library
- Day-to-day assignments given by the Divisional Head

April 1996–April 1997 Prudential Investment Bank Limited Karachi

Programmer Officer

- Development of **Portfolio Management System**
- Development of **Foreign Currency Forward Contract Management Information System**
- Development of **Daily Statement of Affairs**
- Day-to-day assignments given by the CEO

Field of Interests

Community Algorithm, Software Engineering, Artificial Intelligence, Software Project Management, Computer Graphics, Programming and Algorithms

Professional Affiliation

- Member and Volunteer of The Institute of Electrical and Electronics Engineers, IEEE Inc. USA since 1998
- Vice Chairman, IEEE Karachi Section (2014-15, 2010-2011)
- Secretary, IEEE Karachi Section (2016-Now)
- Secretary/Treasurer, IEEE Karachi Section (2012-2013)
- Branch Councilor of IEEE GSESIT Student Branch
- Life Member of Computer Society of Pakistan (CSP)
- Council Member of Computer Society of Pakistan (CSP) Karachi Chapter
- Membership and Scholarship Coordinator of International Organization of Pakistani Women Engineers (IOPWE)
- Work towards organizing **SEARCC '94 Exhibition and Competition** with Computer Society of Pakistan and Big Bang Communication, Karachi
- Work towards organizing "**Millennium Technologies**" Conference by IEEE Inc. USA, Karachi Section, on Nov. 27, 1999
- Work towards organizing "**eTechnologies – vision and challenges**" Conference by IEEE Inc. USA, Karachi Section, on Nov. 25, 2000
- Work towards organizing "**International Multi-Topic Conference (INMIC) 2002 (KIIT), INMIC 2005 (FAST NU), INMIC 2008 (Bahria University), INMIC 2011 (SSUET), and INMIC 2014 (Bahria University)**" Conference by IEEE Inc. USA, Karachi Section, in December 2002, 2005, 2008, 2011, and 2014 respectively
- Work towards organizing "**Student Conference on Engineering Sciences and Technology 2003**" Conference by IEEE Inc. USA, Karachi Section, on Oct. 9-11, 2003
- Presentations at different Student Congresses and conferences of IEEE Inc. USA, **PSC 2007, PSC 2008, KSSC 2008, PSC 2009, eIndus 2009, and SCONEST 2011**

IEEE and other Activities