# Narmeen Zakaria Bawany

### **Education**

#### **Phd**(Computer Science)

FAST-National University of Computer and Emerging Sciences, Karachi
CGPA: 3.88
Course work: Cloud Computing, Ad-hoc and Wireless Sensor Networks, Mobile and Ubiquitous
Computing, Applied Image Processing, Big data, Research Methods

Thesis title "An Effective DDoS Attack Defense Framework for Smart City Applications using SDN"

#### **MS**(Computer Engineering)

Sir Syed University of Engineering and Technology, Karachi CGPA :3.75

### **BE(Computer Systems)**

Bachelor of Engineering in Computer Systems N.E.D. University of Engineering and Technology, Karachi Grade: A+

### **Experience**

Over 15 years of administration, teaching and research experience in the Computer Science and IT department.

Director, Department of Computer Science and IT	Aug 1999 – Jan 2012
Associate Professor, Department of Computer Science and IT, Jinnah University for Women, Karachi	Jan 2008 – to date
Chairperson, Department of Computer Science and IT, Jinnah University for Women, Karachi	Dec 2016- to date

#### **Responsibilities:**

- Managed the department of Computer Science and Information Technology for more than 15 years.
- Semester planning and course assignment
- Conducted interviews for hiring faculty members and supporting staff
- Coordinated with various vendors to buy appropriate equipment for Computer Science laboratories
- Designed the curriculum of the Bachelor of Computer Science, B.S. (Computer Science), B.S.(Information Technology), B.S. (Software Engineering) ,Master of Computer Science, Master of Information Technology and Post Graduate Diploma programmes
- Taught various Computer Science courses to the undergraduate and graduate students
- Co-ordinated various academic projects at the Jinnah University for Women, Karachi.
- Supervised student's research work leading to publications in international journals and/or conferences.
- Supervised Final year projects at Jinnah University for Women
- Designed and setup four Computer Labs for the department of Computer Science and Information Technology

- Designed and managed the Network at the Department of Computer Science
- Designed and developed the Jinnah University for Women website.
- Preparing and delivering presentations during HEC, CIEC and NCEAC Inspections
- Preparing complete documentations for HEC, CIEC, NCEAC inspections
- IEEE Branch Counselor, Jinnah University for Women. (From 2004 to 2015)
- Arranged and chaired the board of studies meeting of CS and IT department
- Prepared minutes of board of studies meeting
- Member, Board of Faculty, Science Faculty
- Member, QEC, Jinnah University for Women
- Participated in academic council meetings regularly as a Director of Computer Science and IT department.
- Prepared budget for the department.
- Worked as project manager for various software projects at JUW including Examination system, Library management system, Course tracking and Quality assurance system

## **Others**

- External examiner at NED University of Engineering and Technology
- FYP External examiner at FAST- NU, Karachi
- FYP co-supervisor at FAST-NU, Karachi
- Invited as Judge in PROCOMM 2013, FAST-NU, Karachi
- August 2015, Guest lecture on Software Defined Networking FAST-NU
- October 2015, Guest lecture on Cloud Computing and Software Defined Networking FAST-NU
- November 2015, Guest lecture on Usability and Security at MAJU
- Fall, 2012 : Taught Human Computer Interaction course to undergraduate students at IBA

## **PUBLICATIONS**

## JOURNALS

- 1. Amber, Saima, Narmeen Bawany, and Saira Begum. "Determination of risk during requirement engineering process." Journal of Emerging Trends in Computing and Information Sciences 3.3 (2012): 358-364.
- Narmeen Bawany and Nazish Nouman. "A Step towards Better Understanding and Development of University Ontology" Research Journal of Recent Sciences Vol. 2(10), 57-60, October (2013) ISSN 2277: 2502.
- Hamna Khan, Munira Iqbal, and Narmeen Bawany. "Web Accessibility Evaluation of News Websites Using WCAG 2.0." Research Journal of Recent Sciences. Vol. 3(1), 23-32, January (2014) ISSN 2277: 2502.
- 4. Narmeen Zakaria Bawany and Jawwad A. Shamsi, "Smart City Architecture: Vision and Challenges" International Journal of Advanced Computer Science and Applications (IJACSA), 6(11), 2015.
- Narmeen Zakaria, Jawwad A. Shamsi, and Khaled Salah. "DDoS Attack Detection and Mitigation Using SDN: Methods, Practices, and Solutions." Arabian Journal for Science and Engineering 42.2 (2017): 425-441.
- 6. Narmeen Zakaria Bawany, Zubair A. Shaikh "Data Privacy Ontology for Ubiquitous Computing" International Journal of Advanced Computer Science and Applications(IJACSA), Volume 8, Issue 1 2017
- Soomaiya Hamid, Narmeen Zakaria Bawany and Jawwad Ahmed Shamsi, "ReCSDN: Resilient Controller for Software Defined Networks" International Journal of Advanced Computer Science and Applications (IJACSA), 8(8), 2017.

- 8. T. Hussain, K. Atta, Narmeen Bawany, and T. Qamar, "Passwords and User Behavior," Journal of Computers, vol. 13, no. 6, pp. 692–704, 2018.
- Tehreem Qamar, Narmeen Zakaria Bawany, and Tehreem Hussain. "Report\_It: Citizen Centric Approach towards e-Governance." International Journal of e-Education, e-Business, e-Management and e-Learning (IJEEEE) 2018 Vol.8(4): 212-218 ISSN: 2010-3654

## CONFERENCES

- 1. Bawany, Narmeen., A. M. Paracha, and N. Naz. "Role of agents in providing better communication", Student Conference on Engineering, Sciences and Technology. IEEE, 2004.
- 2. Narmeen Bawany, Sheeraz Ahmed, and Jawwad A. Shamsi. "Mitigating Malware for Effective Utilization of Network Resources at ISPs." The Third International Conference on Computer Science, Computer Engineering, and Social Media (CSCESM) 2016, Greece
- 3. Narmeen Bawany, and Jawwad A. Shamsi. "Application Layer DDoS Attack Defense Framework for Smart City using SDN." The Third International Conference on Computer Science, Computer Engineering, and Social Media (CSCESM) 2016, Greece
- Shamsi, J. A., ul Hassan, S. Z., Bawany, N., & Shoaib, N. (2018, May). A Comprehensive Course on Big Data for Undergraduate Students. In 2018 IEEE International Parallel and Distributed Processing Symposium Workshops (IPDPSW) (pp. 353-360). IEEE.

## NTS – Graduate Assessment Test (GAT)

- GAT Subject : Passed in the year 2012 with 96.76 percentile score
- GAT General : Passed in the year 2012 with 98.96 percentile score

## **Funded Projects Supervised**

Received funding for undergraduate projects at Jinnah University for Women from National Grassroots ICT Research Initiative

- Improve my City (2014-15)
- Linguistic Sign Communicator (2014-15)
- Track'em (2014-15)
- DroneAid (2017-18)

## Startup launched and incubated at Nest I/O

Two undergraduate projects Improve my City and Track'em were incubated at Nest I/O in 2016

## **Interest Areas:**

Object Oriented Analysis and Design, Data Structures, Software Engineering, Computer Networks, Ubiquitous Computing, Programming Languages, Human Computer Interaction, Cyber Security, Software Defined Networking