

# Farooque Azam

Professor

College of Electrical & Mechanical Engineering

**Email:** farooq@ceme.nust.edu.pk

**Contact:** 054444120

**LinkedIn:** <https://www.linkedin.com/in/dr-azam-2ab41737/>



## About

Dr. Farooque Azam is working as Professor in the College of Electrical & Mechanical Engineering. Dr. Farooque Azam has a PhD in Software. Dr. Farooque Azam has published 124 research articles & conference papers having a citation count of 1026, carried out 2 projects and filed 0 intellectual property.

## Qualifications

<b>PhD in Software</b> Beijing University of Aeronautics and Astronautics , China	2003 - 2007
<b>MS in Software</b> NUST, Islamabad , Pakistan	1999 - 2000
<b>BE in Electrical</b> NED UET Karachi , Pakistan	1982 - 1987

## Experience

<b>Professor</b> College of Electrical & Mechanical Engineering	2021- Present
<b>Adjunct Faculty</b> College of Electrical & Mechanical Engineering	2019 - 2019
<b>Adjunct Faculty</b> College of Electrical & Mechanical Engineering	2017 - 2019
<b>Defence Faculty</b> College of Electrical & Mechanical Engineering	2007 - 2017
<b>Instructor CI B</b> PMA , PMA	2000 - 2003
<b>Maj</b> 56 EME Bn , Sailkot	1996 - 1998

## Awards

<b>TI (M)</b>	2011
<b>President Gold Medal</b> President Gold Medal on getting first position (SGPA=3.94) in MS (Software Engineering) in 2000 from MCS.	2001

## Professional Memberships

<b>PEC</b>	Since 1987
------------	------------

Research Projects

National Projects

<b>A Model-driven Framework for simultaneously supporting Multiple Representations of Embedded System Designs to improve Productivity (MRED)</b>	2022
<b>Funding Agency:</b> HEC	
<b>Amount:</b> PKR 20,383,000.00	
<b>Status:</b> Approved_inprocess	
<b>Establishment of Software Engineering Lab</b>	2008
<b>Funding Agency:</b> HEC	
<b>Amount:</b> PKR 800,000.00	
<b>Status:</b> Completed	

International Projects

Research Articles

<b>Exploring the Effectiveness and Trends of Domain-Specific Model Driven Engineering: A Systematic Literature Review (SLR)</b>	2024
<i>Amina Zafar Farooque Azam Afshan Latif Aon Safdar Muhammad Waseem Anwar</i>	
<i>IEEE Access</i> , Volume 12, Pages 86809-86830	
<b>Impact Factor:</b> 3.400   <b>Quartile:</b> 2   <b>Citations:</b> 4	
<b>DOI:</b> 10.1109/ACCESS.2024.3414503	
<b>A Retargetable Model-Driven Framework for the Development of Mobile User Interfaces</b>	2022
<i>Mehreen Khan Farooque Azam Fatima Samea Muhammad Waseem Anwar Muhammad Rashid Abdul Wahab Muzaffar Wasi Haider Butt</i>	
<i>Journal of Circuits Systems and Computers</i> , Volume 31, No. 1, Article Number 2250018 (30 pages)	
<b>Impact Factor:</b> 1.278   <b>Quartile:</b> 4   <b>Citations:</b> 4	
<b>DOI:</b> 10.1142/S0218126622500189	
<b>An Integrated Machine Learning Framework for Effective Prediction of Cardiovascular Diseases</b>	2021
<i>Farooque Azam Yawar Rasheed Muhammad Abdul Rahim Aqsa Rahim Muhammad Waseem Anwar Abdul Wahab Muzaffar</i>	
<i>IEEE Access</i> , Volume 9, Pages 106575-106588	
<b>Impact Factor:</b> 3.476   <b>Quartile:</b> 2   <b>Citations:</b> 132	
<b>DOI:</b> 10.1109/access.2021.3098688	
<b>A Systematic Review on the Data Interoperability of Application Layer Protocols in Industrial IoT</b>	2021
<i>Farooque Azam Anam Amjad Muhammad Waseem Anwar Wasi Haider Butt</i>	
<i>IEEE Access</i> , Volume 9, Pages 96528-96545	
<b>Impact Factor:</b> 3.476   <b>Quartile:</b> 2   <b>Citations:</b> 49	
<b>DOI:</b> 10.1109/access.2021.3094763	
<b>Reverse Engineering of Object Oriented Systems to ALF</b>	2021
<i>Asad Nawaz Tauseef Ahmad Rana Farooque Azam Muhammad Waseem Anwar</i>	
<i>International Journal of Software Engineering and Knowledge Engineering</i> , Volume 31, No. 5, Pages 745-775	
<b>Impact Factor:</b> 1.007   <b>Quartile:</b> 4	
<b>DOI:</b> DOI: 10.1142/S0218194021500200	
<b>Recent Trends in Underwater Wireless Sensor Networks (UWSNs) – A Systematic Literature Review</b>	2020
<i>Farooque Azam Ayesha Tariq Muhammad Waseem Anwar Tayyba Zahoor Abdul Wahab Muzaffar</i>	
<i>Programming and Computer Software</i> , Volume 46, No. 8, Pages 699-711	
<b>Impact Factor:</b> 0.936   <b>Quartile:</b> 4   <b>Citations:</b> 14	
<b>DOI:</b> <a href="https://doi.org/10.1134/S0361768820080228">https://doi.org/10.1134/S0361768820080228</a>	
<b>Multi-objective regression test suite optimization using three variants of adaptive neuro fuzzy inference system</b>	2020
<i>Ayesha Kiran Wasi Haider Butt Arsalan Shaukat Muhammad Umar Farooq Urooj Fatima Farooque Azam Zeeshan Anwar</i>	
<i>PloS One</i> , Volume 15(12), Article Number e0242708	
<b>Impact Factor:</b> 3.240   <b>Quartile:</b> 2   <b>Citations:</b> 9	
<b>DOI:</b> <a href="https://doi.org/10.1371/journal.pone.0242708">https://doi.org/10.1371/journal.pone.0242708</a>	
<b>A Model-Driven Alarms Framework (MAF) With Mobile Clients Support for Wide-Ranging Industrial Control Systems</b>	2020

<p><i>Farooque Azam Muhammad Waseem Anwar Muhammad Nouman Zafar Abdul Wahab Muzaffar Wasi Haider Butt Hanny Tufail</i>  <i>IEEE Access</i> , Volume 8, Pages 174279-174304</p> <p><b>Impact Factor:</b> 3.367   <b>Quartile:</b> 2   <b>Citations:</b> 3</p> <p><b>DOI:</b> Digital Object Identifier 10.1109/ACCESS.2020.3025933</p>		
<p><b>A model-driven framework for data-driven applications in serverless cloud computing</b></p> <p><i>Fatima Samea Farooque Azam Muhammad Rashid Muhammad Waseem Anwar Wasi Haider Butt Abdul Wahab Muzaffar</i>  <i>PLoS ONE</i> , Volume 15(8), Article Number e0237317</p> <p><b>Impact Factor:</b> 3.240   <b>Quartile:</b> 2   <b>Citations:</b> 21</p> <p><b>DOI:</b> <a href="https://doi.org/10.1371/journal.pone.0237317">https://doi.org/10.1371/journal.pone.0237317</a></p>		2020
<p><b>A Unified Model-Based Framework for the Simplified Execution of Static and Dynamic Assertion-Based Verification</b></p> <p><i>Muhammad Waseem Anwar Muhammad Rashid Farooque Azam Aamer Naeem Muhammad Kashif Wasi Haider Butt</i>  <i>IEEE Access</i> , Volume 8, Pages 104407-104431</p> <p><b>Impact Factor:</b> 3.367   <b>Quartile:</b> 2   <b>Citations:</b> 37</p> <p><b>DOI:</b> 10.1109/ACCESS.2020.2999544</p>		2020
<p><b>A model-driven mobile HMI framework (MMHF) for industrial control systems</b></p> <p><i>Iqra Qasim MUHAMMAD WASEEM ANWAR Farooque Azam Hanny Tufail Wasi Haider Butt Muhammad Noman Zafar</i>  <i>IEEE Access</i> , Volume 8, Pages 10827-10846</p> <p><b>Impact Factor:</b> 3.367   <b>Quartile:</b> 2   <b>Citations:</b> 25</p> <p><b>DOI:</b> 10.1109/ACCESS.2020.2965259</p>		2020
<p><b>A Novel Framework to Automatically Generate IFML Models From Plain Text Requirements</b></p> <p><i>Wasi Haider Butt Maryum Hamdani Muhammad Waseem Anwar Imran Ahsan Farooque Azam Mudassar Adeel Ahmed</i>  <i>IEEE Access</i> , Volume 7, Pages 183489-183513</p> <p><b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 4</p> <p><b>DOI:</b> 10.1109/ACCESS.2019.2959813</p>		2019
<p><b>A model-driven framework for design and verification of embedded systems through SystemVerilog</b></p> <p><i>Muhammad Waseem Anwar Muhammad Rashid Farooque Azam Muhammad Kashif Wasi Haider Butt</i>  <i>Design Automation for Embedded Systems</i> , Volume 23. Issue 3-4. Pages 179-223</p> <p><b>Impact Factor:</b> 2.767   <b>Quartile:</b> 1   <b>Citations:</b> 52</p> <p><b>DOI:</b> 10.1007/s10617-019-09229-y</p>		2019
<p><b>A Model Driven Reverse Engineering Framework for Generating High Level UML Models From Java Source Code</b></p> <p><i>UMAIR SABIR FAROOQUE AZAM SAMI UL HAQ MUHAMMAD WASEEM ANWAR WASI HAIDER BUTT ANAM AMJAD</i>  <i>IEEE Access</i> , Volume 7 Pages 158931-158950</p> <p><b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 28</p> <p><b>DOI:</b> 10.1109/ACCESS.2019.2950884</p>		2019
<p><b>The Influence of Nitrogen Absorption on Microstructure, Properties and Cytotoxicity Assessment of 316L Stainless Steel Alloy Reinforced with Boron and Niobium</b></p> <p><i>Sadaqat Ali Ahmad Majdi Abdul Rani Riaz Ahmad Mufti Farooq I. Azam Sri Hastuty Zeeshan Baig Murid Hussain Nasir Shehzad</i>  <i>Processes</i> , Volume 7 ,Issue 8, Article Number 506</p> <p><b>Impact Factor:</b> 2.753   <b>Quartile:</b> 2   <b>Citations:</b> 14</p> <p><b>DOI:</b> 10.3390/pr7080506</p>		2019
<p><b>A Novel Framework to Automatically Generate Executable Web Services from BPMN Models</b></p> <p><i>Iqra Zafar Muhammad Waseem Anwar Bilal Maqbool Farooque Azam Wasi Haider Butt Aiman Nazir</i>  <i>IEEE ACCESS</i> , Volume 7, Pages 93653-93677</p> <p><b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 16</p> <p><b>DOI:</b> 10.1109/ACCESS.2019.2927785</p>		2019
<p><b>A Comprehensive Investigation of Modern Test Suite Optimization Trends, Tools and Techniques</b></p> <p><i>Ayesha Kiran Wasi Haider Butt Muhammad Waseem Anwar Bilal Maqbool Farooque Azam</i>  <i>IEEE Access</i> , Volume 7, Pages 89093-89117</p> <p><b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 26</p> <p><b>DOI:</b> 10.1109/ACCESS.2019.2926384</p>		2019
<p><b>Automated Model-Based Test Case Generation for Web User Interfaces (WUI) From Interaction Flow Modeling Language (IFML) Models</b></p> <p><i>Farooque Azam Nazish Yousaf Wasi Haider Butt Muhammad Waseem Anwar Muhammad Rashid</i></p>		2019

IEEE ACCESS, Volume 7, Pages 67331-67354	
<b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 29	
<b>DOI:</b> 10.1109/ACCESS.2019.2917674	
<b>A Systematic Review on Code Clone Detection</b>	2019
<i>Qurat Ul Ain Wasi Haider Butt Muhammad Waseem Anwar Farooque Azam Bilal Maqbool</i>	
IEEE Access, Volume 7, Pages 86121-86144	
<b>Impact Factor:</b> 3.745   <b>Quartile:</b> 1   <b>Citations:</b> 131	
<b>DOI:</b> 10.1109/ACCESS.2019.2918202	
<b>UMLPACE for Modeling and Verification of Complex Business Requirements in Event-Driven Process Chain (EPC)</b>	2018
<i>Wasi Haider Butt Muhammad Rashid Aamir Naeem Anam Amjad Brig. Farooque Azam Muhammad Waseem Anwar</i>	
IEEE Access, NULL	
<b>Impact Factor:</b> 4.098   <b>Quartile:</b> 1   <b>Citations:</b> 10	
<b>DOI:</b> 10.1109/ACCESS.2018.2883610	
<b>Event-Driven Process Chain for Modeling and Verification of Business Requirements?A Systematic Literature Review</b>	2018
<i>Anam Amjad Farooque Azam Muhammad Waseem Anwar Wasi Haider Butt Muhammad Rashid</i>	
IEEE Access, Volume 6, Pages 9027-9048	
<b>Impact Factor:</b> 4.098   <b>Quartile:</b> 1   <b>Citations:</b> 46	
<b>DOI:</b> 10.1109/ACCESS.2018.2791666	
<b>Utility of CK Metrics in Predicting Size of Board-Based Software Games....</b>	2017
<i>Farooque Azam Nosheen sabahat Ali Afzal Malik</i>	
Mehran University Research Journal of Engineering and Technology, Volume: 36 Issue: 4 Pages: 989-1000	
<b>Impact Factor:</b> N/A	
<b>DOI:</b> 10.22581/muet1982.1704.22	
<b>Utility of CK Metrics in Predicting Size of Board-Based Software Games</b>	2017
<i>Nosheen Sabahat Ali Afzal Malik Farooque Azam Nosheen Sabahat Ali Afzal Malik</i>	
Mehran University Research Journal of Engineering and Technology, Volume 36, No. 4, Pages 975-986	
<b>Impact Factor:</b> -	
<b>DOI:</b> -	
<b>A Size Estimation Model for Board-Based Desktop Games.</b>	2017
<i>Ali Afzal Malik Nosheen Sabahat Farooque Azam</i>	
IEEE Access, Volume 5, Pages 4980-4990	
<b>Impact Factor:</b> 3.557   <b>Quartile:</b> 1   <b>Citations:</b> 9	
<b>DOI:</b> DOI:10.1109/ACCESS.2017.2678459	
<b>Ranking in Web Services Discovery with User Preferences</b>	2016
<i>Farooque Azam Nouman Nisar Abdul Wahab Muzaffar</i>	
International Journal of Computer Science and Information Security, ISSN:1947-5500,, Vol. 14, No. 12, Pages 978-984	
<b>Impact Factor:</b> 0	
<b>Hybridization of simulated annealing with genetic algorithm for cell formation problem</b>	2016
<i>Mushtaq Khan Nawar Khan Adnan Tariq Liaqat Ali Farooque Azam Syed Husain Imran Jaffery Alam Zeb</i>	
The International Journal of Advanced Manufacturing Technology, Volume 86, Issue 5–8, Pages 2243–2254	
<b>Impact Factor:</b> 2.209   <b>Quartile:</b> 2   <b>Citations:</b> 25	
<b>DOI:</b> 10.1007/s00170-015-8288-3	
<b>A Relation Extraction Framework for Biomedical Text Using Hybrid Feature Set</b>	2015
<i>Abdul Wahab Muzaffar Farooque Azam Usman Qamar</i>	
Computational and Mathematical Methods in Medicine, Volume 2015, Article ID 910423, 12 pages	
<b>Impact Factor:</b> 0.887   <b>Quartile:</b> 3   <b>Citations:</b> 41	
<b>DOI:</b> 10.1155/2015/910423	
<b>Innovative Windows for Duplicate Detection</b>	2015
<i>Farooque Azam Humaira Bano</i>	
International Journal of Software Engineering and Its Applications, Vol.9, No.1, Pages 95-104	
<b>Impact Factor:</b> 0	
<b>Limitations of Service Oriented Architecture and its Combination with Cloud Computing</b>	2015

**Impact Factor:** 0

**DOI:** <https://www.bahria.edu.pk/ojs/index.php/bujict/article/view/86>

**Disintegrating and Reduction of Risk Factor in 3-C's Model Communication Phase used in Global Software Development (G.S.D)**

2014

*Farooque Azam Muhammad Usman Nousheen Hashmi*

*Journal of Basic Applied Scientific Research*, Vol.4(10), Pages 58-70

**Impact Factor:** 0

**DOI:** <https://www.semanticscholar.org/paper/Disintegrating-and-Reduction-of-Risk-Factor-in-Used-Usman-Azam/f4e518faf28c009c1ef75523f845cc32b170c067>

**A Novel Cloud Based Data Management Framework for Team and Project Activities in Global Software Development (GSD)**

2014

*Farooque Azam Anum Tariq Sundas Iftikhar*

*Journal of Applied Environment and Biological Sciences*, Volume 4

**Impact Factor:** 0

**DOI:** -

**Architectural Knowledge Management (AKM) practices and tools for Global Software Development (GSD); A systematic literature review**

2014

*Farooque Azam Anum Tariq Sundas Iftikhar*

*Journal of Applied Environmental and Biological Sciences*, Vol.4( 9 S), Pages 70-81

**Impact Factor:** 0

**Detection and classification of retinal lesions for grading of diabetic retinopathy**

2014

*Muhammad Usman Akram Shehzad Khalid Anam Tariq Shoab Ahmed Khan Farooque Azam*

*Computers in Biology and Medicine*, Volume 45, Pages 161-171

**Impact Factor:** 1.24 | **Quartile:** 3 | **Citations:** 281

**DOI:** 10.1016/j.combiomed.2013.11.014

**Opinion Mining: Issues and Challenges (A survey)**

2012

*Farooque Azam Bakhtawar Seerat*

*International journal of computer applications*, Volume 49, Issue 9

**Impact Factor:** 0

**DOI:** 10.5120/7658-0762

**Database Security and Encryption: A Survey Study**

2012

*Farooque Azam Iqra Basharat Abdul Wahab Muzaffar*

*International journal of computer applications*, Volume 47, Issue 12

**Impact Factor:** 0

**DOI:** 10.5120/7242-0218

**From Modules-to-Services: A Conceptual SOA Migration Approach Based on QoS**

2012

*Farooque Azam Mehrosh Khalid Muhammad Aqeel Iqbal*

*Journal of Basic and Applied Scientific Research*, Vol. 2(12), Pages12246-12254

**Impact Factor:** 0

**A Comparative Model for Tradeoff Analysis of QoS Attributes in SOA**

2012

*Farooque Azam Rabia Bashir Muhammad Aqeel Iqbal Aasia Khanum Hufsa Malik*

*Journal of Basic and Applied Scientific Research*, Vol. 2(11), Pages11097-11105

**Impact Factor:** 0

**Dynamic Web Service Composition and Parameters Matchmaking**

2011

*Farooque Azam Maria Allauddin*

*International Journal of Computer Applications*, Volume 36, No.9, Pages 21-26

**Impact Factor:** 0

**Service Crawling Using Google custom Search API**

2011

*Farooque Azam Maria Allauddin*

*International Journal of Computer Applications*, Vol. 34(7):10-15

**Impact Factor:** 0

**DOI:** DOI:10.5120/4110-5911

- Managing Requirement Risks in Global Software Development** 2011  
*Farooque Azam Aurangzeb Khan Muhammad Shoaib Zafar*  
*International Journal of Computer Applications* , Vol. 33(7), Pages 1-5  
**Impact Factor:** 0
- Usability Aspects in Pervasive Computing: Needs and Challenges** 2011  
*Farooque Azam Abdul Wahab Muzaffar Qureshi Hina Anwar Ali Saeed Khan*  
*International Journal of Computer Applications* , Volume 32(10), Pages 18-24  
**Impact Factor:** 0  
**DOI:**  
[https://www.researchgate.net/profile/Abdul\\_Wahab\\_Qureshi/publication/265905837\\_Usability\\_Aspects\\_in\\_Pervasive\\_Computing\\_Needs\\_and\\_Challenges/links/542953d70cf2e4ce940c9e9b/Usability-Aspects-in-Pervasive-Computing-Needs-and-Challenges.pdf](https://www.researchgate.net/profile/Abdul_Wahab_Qureshi/publication/265905837_Usability_Aspects_in_Pervasive_Computing_Needs_and_Challenges/links/542953d70cf2e4ce940c9e9b/Usability-Aspects-in-Pervasive-Computing-Needs-and-Challenges.pdf)
- Architecture Centric Development in Software Product Lines** 2011  
*Farooque Azam Aurangzeb Khan Jahanzaib Khan*  
*International Journal of Computer Applications* , Volume 30, No.2, Pages 6-12  
**Impact Factor:** 0
- Performance Enhancement Techniques for Modern Reconfigurable Computing Systems** 2011  
*Farooque Azam M. Aqeel Iqbal Uzma Saeed Awan Saifullah Hammad*  
*International Journal of Computer Applications* , Volume 27, Issue 9  
**Impact Factor:** 0  
**DOI:** 10.5120/3327-4577
- Using Symmetric Multiprocessor Architectures for High Performance Computing Environments** 2011  
*Farooque Azam Mohsan Tanveer M. Aqeel Iqbal*  
*International Journal of Computer Applications* , Vol. 27(9), Pages 1-6  
**Impact Factor:** 0  
**DOI:** 10.5120/3332-4582
- Critical Aspects of Project Management Causing Major Impacts on Software Development** 2011  
*Farooque Azam M. Aqeel Iqbal Ahmed Ali Qureshi*  
*International Journal of Computer Application* , Volume 27, No.9, Pages 39-47  
**Impact Factor:** 0  
**DOI:** DOI:10.5120/3326-4576
- A Survey of Quality Assurance Frameworks for Service Oriented Systems** 2011  
*Farooque Azam Maria Allaudin Mehmooda Jabeen Zia*  
*International Journal of Advancements in Technology*, Volume 2, Issue 2  
**Impact Factor:** 0  
**DOI:** -
- Design of Novel Usability Driven Software Process Model** 2010  
*Farooque Azam Hina Gull Sardar Zafar Iqba*  
*International Journal of Computer Science and Information Security*, Volume 8, Issue 9, Pages 46-53  
**Impact Factor:** 0  
**DOI:** -
- A Two Dimensional Approach to Back and Forth Software Process Model** 2010  
*Sameera Amjad Wasi Haider Butt Farooque Azam*  
*International Journal Computer Sciences and Information Security*, Vol. 8, Issue 9, Pages 285-, Dec 2010  
**Impact Factor:** 0  
**DOI:** -
- An Efficient SJRR CPU Scheduling Algorithm** 2010  
*Saeeda Bibi Farooque Azam Sameera Amjad Wasi Haider Butt Hina Gul Rashid Ahmed Yasir Chaudhry*  
*International Journal of Computer Science and Information Security*, Vol. 8, No. 2  
**Impact Factor:** 0  
**DOI:** -

## Conference Proceedings

- Suspicious Model Detection to Improve Model-Based System Development** 2025  
*Muhammad Waseem Anwar Marwareed Rehman Farooque Azam Saliha Ejaz*

<i>31st International Conference on Information and Software Technologies (ICIST 2025), Kaunas, Lithuania, October 16–17, 2025, res.country(132,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-3-031-48981-5	
<b>Improving Federated Learning Efficiency with PruneFL: A Healthcare Perspective</b>	2024
<i>Alvina Muneeb Dr Farooque Azam Dr Imran Shafi Muhammad Waseem Anwar Muhammad Muneeb Arshad</i>	
<i>13th International Conference on Computing and Pattern Recognition (ICCPR 2024), res.country(48,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> Accepted	
<b>PERFORMANCE COMPARISON OF SINGLE CODE BASE DEVELOPMENT TOOLS: FLUTTER, REACT NATIVE, AND XAMARIN</b>	2024
<i>Faran Mushtaq Dr Farooque Azam Muhammad Waseem Anwar</i>	
<i>14th International Conference on Software Technology and Engineering (ICSTE 2024), res.country(48,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> Accepted	
<b>Implementing ISO 27001 Security Measures in Educational Open-Source ERP Systems</b>	2024
<i>Saima Bibi Dr Farooque Azam Muhammad Waseem Anwar</i>	
<i>14th International Conference on Software Technology and Engineering (ICSTE 2024), res.country(48,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> Accepted	
<b>A Framework for Clone Detection in UML Models (UMCD)</b>	2024
<i>Aysha Irshad Dr Farooque Azam Muhammad Waseem Anwar</i>	
<i>16th International Conference on Computer Modeling and Simulation (ICCMS 2024), res.country(48,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> Accepted & Presented	
<b>A Novel Model-Driven Framework for Performance Testing of Service-Oriented Architecture</b>	2023
<i>Ibrahim Khalil Farooque Azam Wasi Haider Butt Muhammad Waseem Anwar Yawar Rasheed Israr Ahmad</i>	
<i>International Bhurban Conference on Applied Sciences &amp; Technology, IBCAST, res.country(177,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> <a href="https://doi.org/10.1109/IBCAST59916.2023.10712852">https://doi.org/10.1109/IBCAST59916.2023.10712852</a>	
<b>A Lecture Centric Automated Distractor Generation for Post-Graduate Software Engineering Courses</b>	2022
<i>Rudeema Chughtai Farooque Azam Dr Wasi Haider Butt Dr Umar Farooq Muhammad Waseem Anwar</i>	
<i>2022 International Conference on Frontiers of Information Technology, FIT 2022, res.country(177,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/FIT57066.2022.00028	
<b>Intelligent Agents in Educational Institutions: NEdBOT - NLP-based Chatbot for Administrative Support Using DialogFlow</b>	2022
<i>Muhammad Shahroze Ali Farooque Azam Aon Safdar Muhammad Waseem Anwar</i>	
<i>Proceedings - 2022 IEEE International Conference on Agents, ICA 2022, res.country(13,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/ICA55837.2022.00012	
<b>MoDLF – A Model-Driven Deep Learning Framework for Autonomous Vehicle Perception (AVP)</b>	2022
<i>Aon Safdar Farooque Azam Muhammad Usman Akram Yawar Rasheed</i>	
<i>Proceedings of the 25th International Conference on Model Driven Engineering Languages and Systems, res.country(233,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1145/3550355.3552453	
<b>Device Interoperability for Industrial IoT using Model-Driven Architecture</b>	2022
<i>Anam Amjad Dr Farooque Azam Dr Waseem Anwar</i>	
<i>2022 24th International Multitopic Conference, INMIC 2022, res.country(177,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/INMIC56986.2022.9972976	
<b>A Systematic Review on Fully Automated Online Exam Proctoring Approaches</b>	2022
<i>Taskeen Fatima Dr Farooque Azam Abdul Wahab Muzaffar</i>	
<i>2022 24th International Multitopic Conference, INMIC 2022, res.country(177,)</i>	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/INMIC56986.2022.9972964	

<b>Seamless Runtime Transformations from Natural Language to Formal Methods - A usecase of Z-Notation</b>	2022
<p><i>Misbah Mehboob Awan Wasi Haider Butt MuhammadWaseemAnwar Farooque Azam</i>  2022 17th Annual System of Systems Engineering Conference (SOSE), res.country(233,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/SOSE55472.2022.9812644</p>	
<b>Deep-learning based framework for sentiment analysis in Urdu language</b>	2022
<p><i>Farooque Azam Maria Masood Muhammad Waseem Anwar Jalees Ur Rahman</i>  2022 2nd International Conference on Digital Futures and Transformative Technologies (ICoDT2), res.country(177,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/ICoDT255437.2022.9787451</p>	
<b>Image Steganography using Least Significant Bit (LSB) – A Systematic Literature Review</b>	2022
<p><i>Muhammad Rashid Farooque Azam Muhammad Abbas Yawar Rasheed Muhammad Waseem Anwar Adnan Aslam Saud S. Alotaibi</i>  2022 2nd International Conference on Computing and Information Technology (ICCIT), res.country(233,)</p> <p><b>Citations:</b> 16  <b>DOI:</b> 10.1109/ICCIT52419.2022.9711628</p>	
<b>A Model Driven Framework for Efficient Bandwidth Allocation in Fog Computing Using Priority Algorithm</b>	2022
<p><i>Mehwish Naz Muhammad Rashid Farooque Azam Muhammad Abbas Yawar Rasheed Mohammed H Sinky Muhammad Waseem Anwar</i>  2022 2nd International Conference on Computing and Information Technology (ICCIT), res.country(233,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/ICCIT52419.2022.9711637</p>	
<b>Integration of Smart Traffic Fog Nodes and Homes through a Model Driven Approach</b>	2022
<p><i>Saud S. Alotaib Muhammad Rashid Farooque Azam Waseem Abbas Yawar Rasheed Mohammed H Sinky Muhammad Waseem Anwa</i>  Proceedings of 2022 2nd International Conference on Computing and Information Technology, ICCIT 2022, res.country(192,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/ICCIT52419.2022.9711644</p>	
<b>A Novel Model Driven Approach for Trajectory-Based Technique of Autonomous Vehicle Route Prediction</b>	2021
<p><i>Ali Nawaz Attique Ur Rehman Tahir Mohammad Ali Farooque Azam Yawar Rasheed Muhammad Waseem Anwar</i>  International Conference on Emerging Technologies, ICET 2021, res.country(233,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/ICET54505.2021.9689848</p>	
<b>The Applications of Model Driven Architecture (MDA) in Wireless Sensor Networks (WSN) - Techniques and Tools</b>	2019
<p><i>Muhammad Waseem Anwar Muazzam A. Khan Wasi Haider Butt Farooque Azam</i>  Future of Information and Communication Conference FICC 2019, res.country(233,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1007/978-3-030-12388-8_2</p>	
<b>A Model Driven Approach for Token Based Code Clone Detection Techniques-An Introduction to UMLCCD</b>	2019
<p><i>Qurat Ul Ain Muhammad Waseem Anwar Ayesha Kiran Qurat Ul Ain Farooque Azam</i>  2019 8th International Conference on Educational and Information Technology, res.country(231,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1145/3318396.3318440</p>	
<b>Towards the Selection of Optimum Alarms System in Leading Industry Automation Software</b>	2019
<p><i>Hanny Tufail Muhammad Waseem Anwar Iqra Qasim Farooque Azam</i>  2019 8th International Conference on Industrial Technology and Management (ICITM), res.country(231,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1109/ICITM.2019.8710731</p>	
<b>A Model Driven Approach for State Management in Mobile Applications</b>	2019
<p><i>Mehreen Khan Muhammad Waseem Anwar Fatima Samea Mudassar Adeel Ahmed Farooque Azam</i>  2019 8th International Conference on Software and Computer Applications, res.country(157,)</p> <p><b>Citations:</b> N/A  <b>DOI:</b> 10.1145/3316615.3316637</p>	



<b>A UML Profile for Multi-Cloud Service Configuration (UMLPMSC) in Event-driven Serverless Applications</b> <i>Fatima Samea Muhammad Waseem Anwar Mehreen Khan Muhammad Rashid Farooque Azam</i> <i>2019 8th International Conference on Software and Computer Applications, res.country(157,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3316615.3316636	2019
<b>A Framework for User Characterization based on Tweets Using Machine Learning Algorithms</b> <i>Kinza Zahra Farooque Azam Wasi Haider Butt Fauqia Ilyas</i> <i>VII International Conference on Network, Communication and Computing, res.country(227,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3301326.3301373	2018
<b>A Novel Method for Inferring Person-to-person Relationship Using Wi-Fi</b> <i>Fauqia Ilyas1 Farooque Azam Wasi Haider Butt Kinza Zahra</i> <i>VII International Conference on Network, Communication and Computing, res.country(227,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3301326.3301372	2018
<b>Implementation of SMART on FHIR in Developing Countries through SFPBRF</b> <i>Farooque Azam Abrar Ahmad Muhammad Waseem Anwar</i> <i>5th International Conference on Biomedical and Bioinformatics Engineering, res.country(113,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3301879.3301881	2018
<b>Development of User Interface for Multi-platform Applications Using the Model Driven Software Engineering Techniques</b> <i>Farooque Azam Saad Rehman Rana Muhammad Kaleem Ullah Sara Tanvir</i> <i>2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), res.country(38,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IEMCON.2018.8615013	2018
<b>Model-Driven Development of Mobile Applications: A Systematic Literature Review</b> <i>Farooque Azam Hanny Tufail Muhammad Waseem Anwar Iqra Qasim</i> <i>2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), res.country(38,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IEMCON.2018.8614821	2018
<b>Mobile User Interface Development Techniques: A Systematic Literature Review</b> <i>Farooque Azam Iqra Qasim Muhammad Waseem Anwar Hanny Tufail Tehreem Qasim</i> <i>2018 IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), res.country(38,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IEMCON.2018.8614764	2018
<b>Business Process Models to Web Services Generation:A Systematic Literature Review</b> <i>Farooque Azam Iqra Zafar Muhammad Waseem Anwar Wasi Haider Butt Bilal Maqbool Aiman Khan Nazir</i> <i>IEEE 9th Annual Information Technology, Electronics and Mobile Communication Conference (IEMCON), res.country(38,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IEMCON.2018.8615096	2018
<b>An Introduction to UMLPDSV for Real-time Dynamic Signature Verification</b> <i>Fatima Samea Muhammad Waseem Anwar Farooque Azam Mehreen Khan Muhammad Fahad Shinwari</i> <i>International Conference on Information and Software Technologies ICIST 2018, res.country(132,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1007/978-3-319-99972-2_32	2018
<b>A Model-driven Approach for Access Control in Internet of Things (IoT) Applications – An Introduction to UMLOA</b> <i>Farooque Azam Mehreen Khan Muhammad Waseem Anwar Fatima Samea Muhammad Fahad Shinwari</i> <i>International Conference on Information and Software Technologies, res.country(132,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1007/978-3-319-99972-2_16	2018
<b>A Comprehensive Investigation of Formal System Verification Tools and Approaches</b> <i>Nazish Yousaf Muhammad Waseem Anwar Farooque Azam Wasi Haider Butt</i>	2018

IEEE Intelligent Systems Conference IntelliSys 2018, res.country(231,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-3-030-01057-7_94	
<b>Comparison of Model Checking Tools Using Timed Automata - PRISM and UPPAAL.</b>	2018
<i>Farooque Azam Aamir Naeem Anam Amjad Muhammad Waseem Anwar</i>	
2018 IEEE International Conference on Computer and Communication Engineering Technology (CCET), res.country(48,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/CCET.2018.8542231	
<b>Comparison of Model Checking Tools Using Timed Automata - PRISM and UPPAAL</b>	2018
<i>Farooque Azam Aamir Naeem Anam Amjad Muhammad Waseem Anwar</i>	
IEEE International Conference on Computer and Communication Engineering Technology (CCET), res.country(48,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/CCET.2018.8542231	
<b>A Comprehensive Investigation of BPMN Models Generation from Textual Requirements?Techniques, Tools and Trends</b>	2018
<i>Bilal Maqbool Farooque Azam Muhammad Waseem Anwar Aiman Khan Nazir Wasi Haider Butt Jahan Zeb Iqra Zafar Zuneera Umair</i>	
9th International Conference on Information Science and Applications ICISA 2018, res.country(48,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-981-13-1056-0_54	
<b>User Identification on Social Networks Through Text Mining Techniques: A Systematic Literature Review</b>	2018
<i>Farooque Azam Wasi Haider Butt Fauqia Ilyas Kinza Zahra</i>	
International Conference on Information Science and Applications, res.country(48,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-981-13-1056-0	
<b>Inferring Social Relationships Through Network: A Systematic Literature Review</b>	2018
<i>Fauqia Ilyas Farooque Azam Wasi Haider Butt Kinza Zahra</i>	
International Conference on Information Science and Applications, res.country(48,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-981-13-1056-0	
<b>A Systematic Review of Adaptive and Responsive Design Approaches for World Wide Web</b>	2018
<i>Nazish Yousaf Wasi Haider Butt Farooque Azam Muhammad Waseem Anwar</i>	
Future of Information and Communication Conference 2018, res.country(197,)	
<b>Citations:</b> N/A	
<b>DOI:</b> <a href="https://link.springer.com/chapter/10.1007/978-3-030-03405-4_50">https://link.springer.com/chapter/10.1007/978-3-030-03405-4_50</a>	
<b>A Systematic Literature Review on Interaction Flow Modeling Language (IFML)</b>	2018
<i>Maryum Hamdani Wasi Haider Butt Muhammad Waseem Anwar Farooque Azam</i>	
Proceedings of the 2018 2nd International Conference on Management Engineering, Software Engineering and Service Sciences, res.country(48,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1145/3180374.3181333	
<b>A Comprehensive Investigation of Model Driven Architecture (MDA) for Reverse Engineering</b>	2017
<i>Umair Sabir Farooque Azam Muhammad Waseem Anwar</i>	
2017 International Conference on Software and e-Business (ICSEB 2017), res.country(94,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1145/3178212.3178215	
<b>A systematic review of requirement traceability techniques and tools</b>	2017
<i>Farooque Azam Hanny Tufail Muhammad Faisal Masood Babar Zeb Muhammad Waseem Anwar</i>	
2017 2nd International Conference on System Reliability and Safety (ICSRS), res.country(109,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/ICSRS.2017.8272863	
<b>Model-Driven Approaches for Software Product Lines: A systematic Literature Review</b>	2017
<i>Kinza Zahra Farooque Azam Fauqia Ilyas Abdul Wahab Muzaffar</i>	
International Conference on Engineering, Computing & Information Technology, res.country(157,)	
<b>Citations:</b> N/A	
<b>DOI:</b> N/A	

<b>A Systematic Review of Big Data Analytics Using Model Driven Engineering</b> <i>Muhammad Nouman Zafar Farooque Azam Saad Rehman Muhammad Waseem Anwar</i> <i>International Conference on Cloud and Big Data Computing, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3141128.3141138	2017
<b>A Systematic Review of Big Data Analytics Using Model Driven Engineering</b> <i>Muhammad Nouman Zafar Farooque Azam Saad Rehman Muhammad Waseem Anwar</i> <i>International Conference on Cloud and Big Data Computing, res.country(231,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3141128.3141138	2017
<b>Verification of Event-driven Process Chain with Timed Automata and Time Petri Nets</b> <i>Anam Amjad Farooque Azam Muhammad Waseem Anwar Wasi Haider Butt</i> <i>9th IEEE GCC Conference and Exhibition, res.country(23,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IEEGCC.2017.8448053	2017
<b>Exploring the Ensemble of Classifiers for Sentimental Analysis: A Systematic Literature Review</b> <i>Ali Athar Wasi Haider Butt Muhammad Waseem Anwar Muhammad Latif Farooque Azam</i> <i>9th International Conference on Machine Learning and Computing, res.country(197,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3055635.3056601	2017
<b>Success Factors of Organizational Change in Software Process Improvement: A Systematic Literature Review</b> <i>Farooque Azam Kinza Zahra Fauqia Ilyas Huma Faisal Nadia Ambreen Nida Gondal</i> <i>5th International Conference on Information and Education Technology, res.country(113,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1145/3029387.3029392	2017
<b>Evaluation of FED-CASE - A Tool to Convert Class Diagram into Structural Coding</b> <i>Farooque Azam Sadia Sadaf Ali Athar</i> <i>2016 International Symposium on Computer, Consumer and Control (IS3C), res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/IS3C.2016.57	2016
<b>Model-Based Requirements and Properties Specifications Trends for Early Design Verification of Embedded Systems</b> <i>Muhammad Rashid Muhammad Waseem Anwar Farooque Azam Muhammad Kashif</i> <i>2016 11th System of Systems Engineering Conference (SoSE), res.country(166,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/SYBOSE.2016.7542917	2016
<b>Expressing Embedded Systems Verification Aspects at Higher Abstraction Level - SystemVerilog in Object Constraint Language (SVOCL)</b> <i>Farooque Azam Muhammad Rashid Muhammad Waseem Anwar</i> <i>2016 Annual IEEE Systems Conference (SysCon), res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/SYSCON.2016.7490561	2016
<b>Size Estimation of Open Source Board Based Software Games</b> <i>Farooque Azam Nosheen Sabahat Ali Afzal Malik</i> <i>2015 International Conference on Open Source Systems &amp; Technologies (ICOSST), res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICOSST.2015.7396414	2015
<b>Software Architecture of a Mobile Robot</b> <i>Abdul Wahab Muzaffar Shumyla Rasheed Mir Muhammad Latif Wasi Haider Butt Farooque Azam</i> <i>2015 International Conference on Computational Science and Computational Intelligence (CSCI), res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/CSCI.2015.185	2015
<b>A Hybrid Approach to Extract and Classify Relation from Biomedical Text</b> <i>Abdul Wahab Muzaffar Farooque Azam Usman Qamar Shumyla Rasheed Mir Muhammad Latif</i>	2015

<i>IKE'15 - The 14th International Conference on Information &amp; Knowledge Engineering</i> , res.country(233,)	
<b>Citations:</b> N/A	
<b>DOI:</b> <a href="https://www.researchgate.net/publication/276271142_A_Hybrid_Approach_to_Extract_and_Classify_Relation_from_Biomedical_Text">https://www.researchgate.net/publication/276271142_A_Hybrid_Approach_to_Extract_and_Classify_Relation_from_Biomedical_Text</a>	
<b>Analysis of Cloud Computing Performance, Scalability, Availability, &amp; Security</b>	2014
<i>Farooque Azam Shoaib Hassan Asim Abbas kamboh</i>	
<i>2014 International Conference on Information Science &amp; Applications (ICISA)</i> , res.country(121,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/ICISA.2014.6847363	
<b>Analysing and Reducing Risk Factor in 3-C's Model Communication Phase Used in Global Software Development</b>	2014
<i>Farooque Azam Muhammad Usman Nousheen Hashmi</i>	
<i>2014 International Conference on Information Science &amp; Applications (ICISA)</i> , res.country(121,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/ICISA.2014.6847362	
<b>Discovering Core Architecture Classes to Assist Initial Program Comprehension...</b>	2012
<i>Farooque Azam Muhammad Kamran Aasia Khanum</i>	
<i>2012 International Conference on Information Technology and Software Engineering</i> , res.country(100,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-3-642-34522-7_1	
<b>Requirement Conflicts Resolution: Using Requirement Filtering &amp; Analysis</b>	2011
<i>Wasi Haider Butt Sameera Amjad Farooque Azam</i>	
<i>International Conference on Computational Science and Its Applications ICCSA 2011</i> , res.country(68,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-3-642-21934-4_31	
<b>A Survey of Enterprise Architecture Analysis Using Multi Criteria Decision Making Models (MCDM)</b>	2011
<i>Mehmooda Jabeen Zia Farooque Azam Maria Allauddin</i>	
<i>Communications in Computer and Information Science</i> , res.country(57,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-3-642-18134-4_100	
<b>A Survey of Enterprise Architecture Analysis Using Multi Criteria Decision Making Models (MCDM)</b>	2011
<i>Mehmooda Jabeen Zia Farooque Azam Maria Allauddin</i>	
<i>International Conference on Intelligent Computing and Information Science ICICIS 2011</i> , res.country(48,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1007/978-3-642-18134-4_100	
<b>An Iterative Approach for Global Requirements Elicitation: A Case Study Analysis</b>	2010
<i>Farooque Azam Nosheen Sabahat Faiza Iqbal Muhammad Younus Javed</i>	
<i>2010 International Conference on Electronics and Information Engineering</i> , res.country(113,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/ICEIE.2010.5559859	
<b>Back and Forth (BnF) Software Process Model</b>	2010
<i>Farooque Azam Hina Gull Saeeda Bibi Sameera Amjad</i>	
<i>2010 Second International Conference on Computer Engineering and Applications</i> , res.country(100,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1109/ICCEA.2010.89	
<b>A New Divide &amp; Conquer Software Process Model</b>	2009
<i>Hina Gull Farooque Azam Wasi Haider Butt Sardar Zafar Iqbal</i>	
<i>International Conference on Computer, Electrical and Systems Science and Engineering</i> , res.country(217,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.5281/zenodo.1062162	
<b>Integrating Value-based Requirement Engineering Models to WebML using IP Business Modeling Framework....</b>	2007
<i>Zhang Li Rashid Ahmad Farooque Azam</i>	
<i>proceedings of the 16th international conference on World Wide Web</i> , res.country(38,)	
<b>Citations:</b> N/A	
<b>DOI:</b> 10.1145/1242572.1242698	

<b>Introducing VIP Business Modeling Framework for Innovative, Information-rich and Process-aware E-commerce Web Applications</b> <i>Farooque Azam Zhang Li Rashid Ahmad</i> <i>2nd International Conference on Emerging Technologies, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICET.2006.335936	2006
<b>Integrating Vip Business Modeling Framework To Uml-Based Web Engineering Approach</b> <i>Zhang Li R. Ahmad Farooque Azam</i> <i>2006 International Conference on Emerging Technologies, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICET.2006.335933	2006
<b>Measuring Navigational Burden</b> <i>Rashid Ahmad Zhang Li Farooque Azam</i> <i>International Conference on Software Engineering Research, Management and Applications (SERA'06), res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/SERA.2006.46	2006
<b>Towards Generic User Interface for Web Based Systems Serving Similar Functions</b> <i>Rashid Ahmad Zhang Li Farooque Azam</i> <i>International Conference on Software Engineering Research, Management and Applications (SERA'06), res.country(233,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/SERA.2006.67	2006
<b>INTRODUCING UML PROFILE FOR MODELLING INFORMATION ARCHITECTURE OF WEB APPLICATIONS</b> <i>ZHANG Li RASHID Ahmad Farooque Azam</i> <i>Proceedings of the 11th Joint International Computer Conference, res.country(48,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1142/9789812701534_0055	2005
<b>Linking business models and technical architecture of Web applications using UML profile</b> <i>Zhang Li Rashid Ahmad Farooque Azam</i> <i>2005 International Conference on Emnerging Technologies , res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICET.2005.1558926	2005
<b>Web Engineering: A New Emerging Discipline</b> <i>Rashid Ahmad Zhang Li Farooque Azam</i> <i>2005 International Conference on Emnerging Technologies, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICET.2005.1558923	2005
<b>Using UML profile for connecting information architecture and detailed information design</b> <i>Farooque Azam Zhang Li Rashid Ahmad</i> <i>IEEE 2005 International Conference on Emerging Technologies, ICET 2005, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICET.2005.1558919	2005
<b>System capacity analysis of hybrid direct sequence frequency hopping spread spectrum multiple access communication system</b> <i>Mohammad AR Khan Dingrong Shao Farooque Azam</i> <i>Proceedings of the IEEE Symposium on Emerging Technologies, 2005, res.country(177,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1109/ICET.2005.1558874	2005
<b>Higher-Level Information Aspects of Web Systems: Addressing the Problem of Disconnection</b> <i>Zhang Li Rashid Ahmad Farooque Azam</i> <i>International Conference on Web Engineering ICWE 2005, res.country(13,)</i> <b>Citations:</b> N/A <b>DOI:</b> 10.1007/11531371_60	2005
<b>Towards higher-level information aspects of Web Systems: An MDA Approach...</b> <i>Farooque Azam Zhang Li Rashid Ahmad</i>	2005

5th International Conference on Web Engineering, ICWE 2005, res.country(13,)

**Citations:** N/A

**DOI:** [https://www.researchgate.net/publication/225144655\\_Higher-Level\\_Information\\_Aspects\\_of\\_Web\\_Systems\\_Addressing\\_the\\_Problem\\_of\\_Disconnection](https://www.researchgate.net/publication/225144655_Higher-Level_Information_Aspects_of_Web_Systems_Addressing_the_Problem_of_Disconnection)

**Routing with anycasting in ad-hoc networks**

2005

*Rashid Ahmad Zhang Li Farooque Azam*

*IFIP International Conference on Wireless and Optical Communications Networks 2005, res.country(2,)*

**Citations:** N/A

**DOI:** 10.1109/WOCN.2005.1436056