

Curriculum Vitae

JAVAID IQBAL

Professor & Head

P.G. Department of Computer Science

University of Kashmir, Hazratbal

Srinagar, Jammu & Kashmir – 190006 India

PRESENT ADDRESS:

c/o P.G Department of Computer Science,

University of Kashmir, Srinagar, Jammu and Kashmir

India-190006

Tel: +91-7006436048

Email: iamjavaid@gmail.com
iamjavaid@uok.edu.in

PROFILE SUMMARY

Over 17 years of diverse teaching experience in the field of Computer Science and Engineering specializing in Mathematical Modeling of Problems before their translation into Computer Algorithms. I have exceptional understanding of the problems in the domains of Probabilistic Machine Learning and Mathematical Models for Software Reliability Studies. My love for Mathematical Modeling of software solutions, makes me highly relevant research-wise for the development of cutting-edge algorithms/ models for real-world automation problems. I am the pioneer of Data Science & Artificial Intelligence programme in the University of Kashmir. With the able administrative vision and acumen of Hon'ble Vice Chancellor, have successfully got introduced/started a 5-year Integrated Masters programme in Data Science & Artificial Intelligence (5-YIMPDS&AI) during the year 2024 in the capacity of the Head of the Department. Furthermore, I have the honor of having got the nomenclature of the M.Tech (Computer Science) changed to M.Tech (Computer Science & Engineering) after a series of meetings with the Deans and the Hon'ble Vice-Chancellor of the University of Kashmir. In the capacity of Head of the Department, I have the honor of being part of the high-powered committees for the development of Statutes for the 5-YIMPDS&AI offered at the Department of Computer Science, UoK. I have been providing my experiential acumen for helping the Department and the University achieve a place on the national & international academic pedestal. Besides, I have been instrumental in providing my expert opinions for augmenting the vision, innovation, support, strategic planning and consultancy for the University of Kashmir. My research credentials and expertise have led to introduce a new course title "Software Reliability Engineering" in the curriculum of M.Tech (Computer Science).

RESEARCH INTRESTS:

Probabilistic Machine Learning; Software Model Optimizations; Software Reliability Modeling

Education

Degree	Discipline	Institution	Country	Year
Ph.D.	Computer Science	University of Kashmir	India	2014
M.C.A (1 st batch at DoCS, UoK)	Computer Applications	University of Kashmir	India	2004
B.Sc.	Mathematics, Physics, Electronics	University of Kashmir	India	2001

Academic Leadership and Contribution :

- ✓ Head of the Department, FIRST TERM: (23rd May, 2023- 14-2-2024) at P.G. Department of Computer Science.
- ✓ Head of the Department, FIRST TERM: (14-2-2024 – till date) at P.G. Department of Computer Science.
- ✓ Have served as Expert member on many Selection Committees for permanent appointments in different Universities, apart from the routine contractual engagements.
- ✓ Have served as Expert member on many high-powered academic committees of different Universities in Online/ Offline mode
- ✓ Have served as external expert for PhD thesis evaluation and PhD viva voce of different Universities in Online mode
- ✓ Have been part of the technical expert team that inspected and submitted its recommendation to the Competent Authority for grant of University affiliation in respect of the proposed engineering programmes of B.Tech (CSE), B.Tech (IT) and B.Tech (A.I) to the newly launched private-sector college “Kashmir College of Engineering” located at Parihaspora, Pattan, Baramulla.
- ✓ Have been nominated by Hon’ble Vice Chancellor, UoK, as a 3-year Member of BOS for B.Tech in Artificial Intelligence (A.I) for framing of curriculum and syllabus for the programme vide Letter No F(BOS-AI)Acad/KU/24, Dated: 27-09-2024 issued by Assistant Registrar (ACADEMIC) addressed to the Dean, School of Engineering, IOT, Zakura, University of Kashmir, Srinagar.

Experience:

Institution	Rank	Department	From- To	Substantive
University of Kashmir, Main Campus, India	Head of the Department (2 nd Term as Professor and Head)	Department of Computer Science	April, 2025 to till date	YES
University of Kashmir, Main Campus, India	Head of the Department (<i>First Term as Associate Professor and Head</i>)	Department of Computer Science	23 rd May, 2023 - April, 2025	YES
University of Kashmir, Main Campus, India	Professor	Department of Computer Science	April 2025 – till date	YES
University of Kashmir, Main Campus, India	Associate Professor	Department of Computer Science	Feb. 2021 - Feb. 2025	YES
University of Kashmir, P.G Centre / North/ Main Campus, Baramulla/ Srinagar, India	Assistant Professor (Stages- I, II, III)	Department of Computer Science,	Feb. 2007 to Feb, 2021	Yes
BGSB University, Rajouri, India	Assistant Professor	Department of Computer Science	Nov. 2006 to Feb. 2007	Yes

Initiatives taken in the capacity of Head of Department:

[23rd May 2023 to 2024]

Having taken over as Head of the Department in May 2023, I have proactively contributed to the upliftment of the Department and the University itself. This is substantiated by having accomplished the following academic and administrative milestones:

- i. In 2023, convened the first-ever (maiden) Four-year UG Curriculum Development Workshop under NEP-2020 for the development of curriculum for the 4-year UG programme in Computer Applications offered in the all affiliated colleges of Kashmir province.
- ii. In 2023, convened the first-ever / maiden Alumni Meet for the P.G Department of Computer Science, University of Kashmir since its inception in 2001.
- iii. In 2023, chaired the first-ever / maiden Board of Studies (BOS) under NEP-2020 for 4-year UG programme(FYUP) in Computer Applications offered in the all affiliated colleges of Kashmir province.
- iv. In 2023, moved the proposal for the launch of a Master's programme in Data Science and Artificial Intelligence. The said proposal was accepted by the Competent Authority. Thus, I have the privilege of being called the Pioneer for "Data Science and Artificial Intelligence" education in the Kashmir Province. After strenuous and through discussions and deliberations in high-powered committees, the formal Notification for the Introduction of the 5-year Integrated Masters Programme in Data Science and Artificial Intelligence (5YIMP DS&AI) was issued in 2024.
- v. In 2023-2024, have been part of many high-powered committees mandated with the framing and reviewing of the Statutes for the proposed 5YIMP DS&AI. I have provided written and verbal feedback to compile and consolidate these Statutes.
- vi. In 2023-2024, after a series of meetings with the different stakeholders, I successfully convinced the Competent Authority to have the nomenclature of M.Tech (Computer Science) programme offered in the Department changed to M.Tech (Computer Science & Engineering) programme. This initiative has enabled the concerned students to follow their relevant academic trajectory and support proper industry alignment.
- vii. In 2024, chaired the Board of Studies (BOS) under CBCS framework for the existing Masters programme in Computer Applications (M.C.A). The highlights of this BOS include the curriculum development that aligns with the requirements of National Board of Accreditation (N.B.A). This is evident from the inclusion of Programme Objectives, Programme outcomes, Programme Educational Outcomes. Besides, every course in the prescribed syllabus lists the Course Objectives, Course Outcomes and Mapping of POs with COs. This is the first BOS for the MCA programme that aligns with the NBA requirements.
- viii. In 2024, chaired the prestigious first-ever / maiden BOS for the newly launched 5-year Integrated Masters Programme in Data Science and Artificial Intelligence (5YIMP DS&AI).
- ix. On the public outreach front, I have encouraged in-person visits of students (boys/girls) from numerous remotely located schools/ Senior Schools/

Secondary Schools to our state-of art lab infrastcture like NVIDIA DGXA100 server, MATLAB HPC Server and other computing facilities in the Department. This initiative aligns with the vision of NEP-2020 for School Education Department of the UT of J&K.

Headship Report Card [23rd May 2023 to 2024]

I have convened numerous meetings of Departmental Committee, Departmental Research Committee, and Board of Studies (BOS) for FYUP under NEP-2020, MCA under CBCS and 5YIMP DS&AI under NEP-2020 to enable the smooth conduct of teaching, research and administrative activities in the Department and aligning with the demands of the Society, Industry, Nation and the World. The statistics of these meetings that I chaired is presented below:

S.No	Year	No. of Departmental Committee (DC) Meetings convened/ chaired	No. of Departmental Research Committee (DRC) meetings chaired	No. of Board of Studies(BOS) meetings Chaired/Convened
1	23 rd May 2023 to 31 st Dec 2023	04	03	01 (FYUP in Computer Applications under NEP-2020)
2	2024	16	05	03 (MCA, M.Tech CSE, FYIMP in DS & AI)
TOTAL		20	08	04

Core Competencies and Strengths:

- Teaching Machine Learning Mathematics, Machine Learning, Artificial Intelligence, Internet of Things, Software Reliability Engineering, C/C++/Python/R/Aurdino sketch Programming, Programming paradigms, Data Structures , Databases , Computer Algorithms , Data Mining, Computer Graphics , Discrete Mathematical Structures in Computer Science, Computer Architecture, Java Programming, System Programming , Operation Research to the Master of Computer Applications(MCA) and M.Tech. CSE students of P.G. Department of Computer Science.
- Conducted labs in C/C++, Java to demonstrate the procedural and object-oriented programming constructs; OpenGL/C/C++ for demonstrating the implementation of the mathematical procedures/ algorithms in the subject of Computer Graphics; C/C++ to carry out the simulations of the working of Assembler, Loader, Macro-processor when input with IBM 360/370 Assembly programs; SPSS/ R programming to demonstrate the statistical data analysis and reliability model evaluations;

- Multi-Domain Expertise E.g. Mathematical Modeling of real-world Automation problems before their Algorithmic Design and implementations.
- Excellent team player, Mastery over written and verbal English communication, motivator with a high level of interpersonal and communication skills, Positive attitude and a strong sense of commitment to deliverables, Strong disposal of routine/ critical administrative affairs, committed to meeting deadlines
- Strongly believe in “do-not-put-off-till-tomorrow-what-you-can-do-today”, ability to perform in constrained working environments, ability to persevere in unforthcoming scenarios, ability to handle office business independently, have a photographic memory, do not need to carry evidential documents along / jot down the resolutions in meetings, good hold over the framing, interpretation and application of the University Statutes.
- Imaginative academician and administrator with a scientific thought process owing to my background of Bachelors in Mathematics, Physics and Electronics which make me a natural fit in the domain of Computer Science. Technically resourceful and comfortable with configurations, setups, terminologies and system integrations.
- Possess a high level of personal initiative and energy, Capability to perform constrained and unforthcoming work environments, work overtime. Dynamic, Innovative, Self-starter and a Good Listener, Rationale speaker.
- Blessed with the art of Technical and Formal writing skills. Ability to draft proposals independently under constrained environments.

Academic Project:

With my strong science background in Mathematics, Electronics and Physics, in 2004, have been a pioneer in the embedded systems. Enjoyed working on a full-semester Masters Project in the domain of Embedded System. The project title was “Controlling of Multiple devices using GSM-SMS services” involved the use Embedded C (Keil C) for programming 89C51 Micro-controller. Taking advantage of my expertise in Electronics, created a Circuit that would receive a pre-formatted SMS from a GSM cellphone, process the command in it using Hayes AT commands, and accordingly actuate the relay or check the status of a relay/ appliance connected to the relay, and return the status in the reply SMS to the sender’s cell phone. This involved the development of I2C protocol, using manual assembly language coding in Keil C, to establish communication the EEPROM that was used for storing the password. Also worked on RTOS and development of Keyboard driver in Keil C especially handling clock synchronization and de-bounce of keys using Keil C. The Interfacing of the ADC /DAC , configuration of the Modem were also part of the same project.

The code was written in Embedded C / Assembly Language. Books authored by Feynman on Physics / Mazidi and Mazidi on Micro-controllers was the go-to resource used, apart from the ICs (RTC, microprocessor chip, ADC, DAC) used in the Circuit wired on a breadboard.

Research Projects Completed:

1. Principal Investigator for the research project "Algorithm Design and Mathematical Modelling of Software Testing Effort Consumption" with a total funding of 3.00 lakhs funded by JK ST & IC, Government of J&K, India.

Science & Technology Department Sanction Letter No.

JKST&IC/SRE/878-

80 dated 27-10-2021

Total cost of the project:

3.00 lakhs

Date of Start:

27-10-2021

Period.

From **27-10-2021** to **27-10-2023**

Name of the Principal Investigator:

Dr. Javaid Iqbal,

Designation:

Professor & Head,

Department of Computer Science

University of Kashmir

Name of the Institution:

Summary of the Project:

This project led to the publication of two journal articles and one book chapter, as detailed below:

- i. Iqbal, Javaid, Nyla Manzoor, Avinash K. Shrivastava, and Ishfaq A. Malik. *"Integrating Burr type testing effort functions in logistic reliability growth model with uncertainty factor."* International Journal of System Assurance Engineering and Management 14, no. 6 (2023): 2365-2375. Springer

This paper presents a reliability growth model that incorporates Burr-type testing effort functions with an uncertainty factor. It aims to improve the accuracy of software reliability predictions by modeling the testing process more realistically, addressing uncertainties that arise during software testing and development.

- ii. Khurshid, Shozab, Javaid Iqbal, Ishfaq Ahmad Malik, and Basrah Yousuf. *"Modelling of NHPP based software reliability growth model from the perspective of testing coverage, error propagation and fault withdrawal efficiency."* International Journal of Reliability, Quality and Safety Engineering 29, no. 06 (2022): 2250013. World Scientific

This study focuses on a non-homogeneous Poisson process (NHPP)-based software reliability growth model. The model incorporates factors like testing coverage, error propagation, and fault withdrawal efficiency to provide a more comprehensive understanding of software reliability. The aim is to model how efficiently errors are detected and corrected during testing.

- iii. Iqbal, Javaid, Nyla Manzoor, and Refath Farooq. *"Study and Analysis of Testing Effort Functions for Software Reliability Modeling."* In System Reliability and Security, pp. 143-163. Auerbach Publications , 2023. CRC Press, Taylor & Francis

This book chapter investigates various testing effort functions used in software reliability models. It provides a detailed analysis of how different functions can influence the modeling of software reliability. The focus is on understanding how testing effort impacts the reliability growth during the software development process.

In summary, all three publications focus on improving the modelling of software reliability by considering various aspects of the software testing process

Professional Trainings

Course Type / Duration	Name of the Course	Duration		Sponsoring Agency
		From	To	
Orientation / 4-weeks' duration	General Orientation Course	15-02-2007	14-03-2007	UGC HRDC UoK
Refresher / 3-weeks' duration	Refresher Course	16-01-2012	08-02-2012	UGC HRDC UoK
Refresher / 3- weeks' duration	Special Summer School	23-07-2015	14-08-2015	UGC HRDC UoK
Refresher / 3-weeks' duration	Special Summer School Refresher Course in Sciences	09-08-2018	07-09-2018	UGC HRDC UoK
Workshop / 1-week	"Mathematics and its applications"	5-10-2015	11-0-2015	Department of Mathematics, UoK
Workshop / 3-day	"Research Promotion Workshop on Introduction to Graph and Geometric Algorithms"	18-05-2015	20-05-2015	Department of Mathematics and Computer Science in collaboration with TIFR, Mumbai
International Workshop / 4-day	"Optimization Techniques & Softwares"	19-10-2013	22-10-2013	Department of Statistics, UoK, Srinagar, J&K, India
ISTE Workshop / 2-Week	"Database Management Systems"	21-05-2013	31-05-2013	IIT Bombay under National Mission on

				Education through ICT (MHRD, Govt of India) at NIELIT Srinagar
Short Term Course / 5-day	“Computer Numerical Control Machines”	17-09- 2012	21-09-2012	National Institute of Technology, Srinagar
Short Term Course / 1-Week	“Research Methodology in Sciences (Using Statistical Softwares)”	27-08-2012	01-09-2012	UGC-ASC, UoK, Srinagar
Workshop / 1-day	“Next Generation Networks”	26-05-2012	26-05-2012	National Institute of Technology, Srinagar.

Professional Recognition/ Award/ Prize/ Certificate, Fellowship received

S.No.	Name of Award	Awarding Agency/Authority	Year
1	Best Journal Paper Award	Editor in Chief Cogent Engineering (SCI indexed Journal) Publisher: Taylor and Francis	2019

Patents Granted: (National/ International)

S.No	Innovation Title	Application Number	Status	Granting Agency	National / International
1.	A Vendor-Management Inventory System and its Method thereof	2021103825	Granted 2021-07-02	Australian (AusPat)	International
2	IOT Based Stress Management System	202311049163 A	Granted 11-08-2023	Indian	National

Books Edited/authored

S.No	Book Title	Publisher	Status	National/ International
1.	Software Reliability and Security: Techniques and Methodologies Edited By: Javaid Iqbal , Faheem Syeed Masoodi, Ishfaq Ahmad Malik, Shozab Khurshid, Iqra Saraf, Alwi M. Bamhdi	CRC Press Taylor and	eBook Published : 7 December 2023	International

	Edition 1st Edition First Published: 2023 DOI: https://doi.org/10.1201/9781032624983 eBook: ISBN9781032624983	Francis Group	Pages: 272	
2.	Navigating the Future of Finance in the Age of AI, Edited By: Bilal Ahmad Pandow, Faheem Syeed Masoodi, Javaid Iqbal , Gousiya Hussain, ISBN13: 9798369343821 ISBN13 Softcover: 9798369343869 EISBN13: 9798369343838 DOI: 10.4018/979-8-3693-4382-1	IGI-Global	Release Date: August, 2024 Pages: 399	International
3.	Applying Blockchain Technology Concepts and Trends, Edited By: Javaid Iqbal, Alwi Bamhdi, Bilal Ahmad Pandow, Faheem Syeed Masoodi ISBN 9781032637037 https://www.routledge.com/Applying-Blockchain-Technology-Concepts-and-Trends/Iqbal-Bamhdi-Pandow-Masoodi/p/book/9781032637037	CRC Press Taylor and Francis Group	eBook Release date: May 2025 Pages: 280	International

Seminars/workshop Organized:

1. Convened the Maiden Departmental Alumni Meet on 26-09-2023 for the pass-out MCA/ M.Tech graduates from the Department of Computer Science, University of Kashmir, Srinagar, India.
2. Convener of one day workshop for Curriculum Development for FYUGP in Computer Applications under NEP-2020 on 12th June, 2023 at P. G. Department of Computer Science, University of Kashmir, Srinagar, India.
3. Technical Programme Committee member for special Session titled "Communication and Network Security" of INDIACom-2023, 10th International Conference on Computing for Sustainable Global Development held on 15-17 March, 2023 at Bharati Vidyapeeth(BVICAM), New Delhi, India.
4. **Coordinated** UGC sponsored 2-week Refresher Course in Information Technology (Interdisciplinary) February 23, 2022 to March 08, 2022 at UGC-HRDC, , University of Kashmir, Srinagar, India.
5. **Coordinated** UGC sponsored 2-week Refresher Course in Information Technology (Interdisciplinary) February 27, 2021 to March 12, 2021 at UGC-HRDC, , University of Kashmir, Srinagar, India.
6. Chaired Session during 13th JK Science Congress held between 2-4th April, 2018 at University of Kashmir, Srinagar, India.
7. Technical Programme Committee Member for special Session titled "Trends in Software Engineering" during INDIACom-2015, 2nd IEEE International Conference

on Computing for Sustainable Global Development held between 11-13th March, 2015 at Bharati Vidyapeeth(BVICAM), New Delhi, India.

8. Organized a 2-Day workshop on “Data Analysis using SPSS” conducted on 20th and 21st February, 2014.

Professional Memberships:

- ✓ Fellow of Institute of Electronics and Tele Communication Engineers (FIETE) ID: M-235942
- ✓ Member of Computer Society of India (MCSI) ID: N1222945
- ✓ Member of International Association of Engineering (IAENG) ID: 145135
- ✓ Member of Expert Team of DOEACC Centre Accreditation (NIELT, New Delhi)
- ✓ Member Special Interest Group on Software Engineering (SIGSE) of CSI.
- ✓ Former member, Association for Computing Machinery (ACM) ID: 0363984.

Courses Taught at MCA/M.Tech. Level and Teaching Interests and expertise.

- Mathematics for Machine Learning
- Artificial Intelligence
- Machine Learning
- Software Reliability Engineering
- Mathematical Modeling using differential equations
- Mathematical Optimizations (LSE/MLE/EM/Lavenberg-Marquadt)
- Mathematical Optimizations (Convex/ unconstrained optimizations)
- Metaheuristic Optimizations –Algorithm design
- Internet of Things
- Discrete Mathematics, Data Structures
- Operating System, System Programming
- Computer Graphics/OpenGL Programming/Game optimization
- Real-Time Graphics Rendering in C++ / Fast Forward MPEG
- Design and Analysis of Algorithms
- Object Oriented Analysis and Design
- Java Programming
- C/C++ Programming
- Python
- R programming
- Assembly language
- Arduino Sketching
- Circuit Design and interfacing

Professional Experience/ Managerial Roles

- ☐ **Head of the Department, FIRST TERM:** (23rd May, 2023- 14-2-2024) at P.G. Department of Computer Science.
- ☐ Head of the Department, FIRST TERM: (**14-2-2024 – till date**) at P.G. Department of Computer Science.

Board of Studies (BOS):

- **Convener of Board of Studies (Curriculum Development Committee)** for 2-year M.Tech Computer Science & Engineering offered at P.G. Department of Computer Science, University of Kashmir **[BOS held on 29-10-2024]**
- **Chairman of Board of Studies (Curriculum Development Committee)** for 5-year Integrated Masters programme in **DS & AI under NEP-2020**, offered at P.G. Department of Computer Science, University of Kashmir. **[BOS held on 27-09-2024]**
- **Chairman of Board of Studies (Curriculum Development Committee)** for 2-year Masters programme in Computer Applications (M.C.A) **under CBCS**, offered at P.G. Department of Computer Science, University of Kashmir. **[BOS held on 14-08-2024]**
- **Chairman of Board of Studies (Curriculum Development Committee)** for 4-year Undergraduate programme **(FYUP) under NEP-2020**, offered at P.G. Department of Computer Science, University of Kashmir. **[BOS held on 11-08-2023 & 28-11-2023]**
- Member (2007- 2023) of Board of Studies **(Curriculum Development Committee)** for 2-year Masters programme in Computer Applications (MCA), offered at P.G. Department of Computer Science, University of Kashmir.
- Member (2016- till date) of Board of Studies **(Curriculum Development Committee)** for 2-year M.Tech programme in Computer Science (M.Tech CS /CSE), offered at P.G. Department of Computer Science, University of Kashmir.
- Member (2007- 2023) of Board of Studies for undergraduate B. C. A programme offered at the affiliated colleges of the Kashmir province.

Departmental Research Committee (DRC)

- **Chairman of Departmental Research Committee(DRC)**, for carrying out the research activities related to Ph.D programme offered at P.G. Department of Computer Science, University of Kashmir.
- Member (2014 – May 2023) of **Department Research Committee**, at P.G. Department of Computer Science, University of Kashmir.

Research Progress Assessment Committee (RPAC)

- **Chairman of Research Progress Assessment Committee**, for carrying out the assessment of the research progress during the four mandatory RPACs related to Ph.D programme offered at P.G. Department of Computer Science, University of Kashmir.
- Member (2016 – May 2023) of **Research Progress Assessment Committee** , at P.G. Department of Computer Science, University of Kashmir.

Departmental Committee (DC)

- **Chairman of Departmental Committee**, for carrying out the departmental activities at P.G. Department of Computer Science, University of Kashmir.

- Member (2007 – May 2023) of **Departmental Committee**, for carrying out the departmental activities at P.G. Centre, Baramulla/ North campus/ Department of Computer Science, University of Kashmir.

Departmental Purchase Committee (DPC)

- **Chairman** of **Departmental Purchase Committee** for writing the Budget allotment proposals and purchase of goods and services via GeM at the the P.G. Department of Computer Science, University of Kashmir.
- Member (2007 – May 2023) of **Departmental Purchase Committee**, for carrying out the departmental activities at P.G. Centre, Baramulla/ North campus/ Department of Computer Science, University of Kashmir.

Miscellaneous Roles

- **Chairman** of Admission Committee, for student admissions to the MCA, M.Tech (CS/CSE) and 5-Y IMP in DS &AI offered at P.G. Department of Computer Science, University of Kashmir.
- Member, Admission Committee during the year 2022 for student admissions to the MCA, and M.Tech (CS/CSE) offered at P.G. Department of Computer Science, University of Kashmir.
- Academic Counselor for MCA batch 2022.
- Career Counsellor (December, 2020 till May 2023) for M.Tech(CS) programme
- **Coordinator** (3rd March, 2016 – 2017), Directorate of Internal Quality Assurance (DIQA), University of Kashmir.
- In-charge Departmental Timetable (October 2012 to 2017).
- Coordinator e-awards Management (October 2012 till date).
- **Academic Counselor** [CBCS batches 2014 – 2017, & MCA batch 2015, MCA batch 2022(partially)] for MCA programme offered at Department of Computer Science, University of Kashmir.
- **Academic Coordinator** (Feb, 2007 - October 08, 2012) for the programme of Computer Science at P.G Centre, Baramulla/ North Campus, University of Kashmir.
- Nodal Officer (2011- October 08, 2012) for Directorate of Internal Quality Assurance at North Campus, University of Kashmir.
- Warden, Boys Hostel, (2011- October 08, 2012) at North Campus, University of Kashmir.
- Proctor (2011- March, 2012) North Campus, University of Kashmir.
- **Coordinator, Choice based Credit System(CBCS)** for courses of MCA, MSc-IT and PGDCA offered, *from time to time*, at P.G. Department of Computer Science, University of Kashmir.

Books / Book Chapters :

1. **Javaid Iqbal**, Nyla Manzoor, and Refath Farooq. "Study and Analysis of Testing Effort Functions for Software Reliability Modeling." In System Reliability and Security, pp. 143-163. Auerbach Publications, 2023. CRC Press, Taylor & Francis.
2. Din, Aafaq Mohi Ud, Shaima Qureshi, and **Javaid Iqbal**. "GNN Approach for Software Reliability." In System Reliability and Security, pp. 1-13. Auerbach Publications, 2023. CRC Press, Taylor & Francis.
3. Aafaq Mohi Ud Din, **Javaid Iqbal**, and Shaima Qureshi "Software Reliability Prediction Using Neural Networks: A Non-parametric Approach" pp. 14-27. Auerbach Publications, 2023. CRC Press, Taylor & Francis.

Sessions Chaired:

1. Chaired a Session on "**Computing for Sustainable Global Development**, in 19th Edition of International Conference **INDIACom-2025** held at Bharati Vidyapeeth, New Delhi (INDIA), during the 02nd – 04th April, 2025
2. Chaired a Session on "Sustainable Technologies for the Betterment of the World" in 3rd **DELCON; 2024 IEEE** International Conference on Advancing Technology for Sustainable Development organized by BVICAM, New Delhi, during 21st - 23rd November 2024.
3. Chaired the Session on 4th April 2018", in the 13th Jammu and Kashmir Science Congress (JKSC-2018) organized from 2nd to 4th April 2018 by University of Kashmir in collaboration with J&K state science, Technology and Innovation Center.

SELECT Journal Publications:

S. No.	Journal publication Title, Journal Name, Publisher	Author's Name	Publisher	Year
1.	Nazir, Rabia, Javaid Iqbal, and Tariq Rasool. "A two-dimensional software reliability growth model incorporating testing effort and coverage." <i>Safety and Reliability</i> . (SCOPUS Indexed)	Rabia Nazir, Javaid Iqbal, Tariq Rasool	Taylor & Francis,	2026
2.	"NHPP based Testing Coverage model with Fault Removal Efficiency and Error Generation" <i>International Journal of Reliability, Quality and Safety Engineering</i> (2024). https://doi.org/10.1142/S0218539324500463 (SCI Indexed)	Javaid Iqbal, Rabia Nazir, Tariq Rasool	World Scientific	2024
3.	"Developing an innovative Imperfect Debugging Software Reliability Growth Model with enhanced Testing Coverage strategies." <i>International Journal of Reliability, Quality and Safety Engineering</i> (2024). (SCI Indexed)	Rabia Nazir, Javaid Iqbal , Faheem Syeed Masoodi, and Avinash K. Shrivastava.	World Scientific	2024
4.	Integrating Burr type testing effort functions in logistic reliability growth model with uncertainty factor. <i>International Journal of System Assurance Engineering and Management</i> , 14(6), 2365-2375. (SCI Indexed)	Javaid Iqbal , Manzoor, N., Shrivastava, A. K., & Malik, I. A.	Springer	2023
5.	"Modelling of NHPP based Software Reliability Growth Model from the Perspective of Testing Coverage, Error Propagation and Fault Withdrawal Efficiency" in <i>International Journal of Reliability, Quality & Safety Engineering (IJRQSE)</i> (SCI Indexed)	Shozab Khurshid, Javaid Iqbal , Ishfaq Ahmad Malik, Basrah Yousuf	World Scientific	2022
6.	"Generalized multi-release Framework for Fault Determination with Fault Reduction Factor" <i>International Journal of Information and Computer Security (IJICS)</i> , Inderscience, (SCOPUS Indexed)	Khurshid, Shozab, A. K. Shrivastava, and Javaid Iqbal .	Inder Science	2022
7.	Modelling and Predicting Software Vulnerabilities Using a Sigmoid Function", in <i>International Journal of Information Technology</i> , Springer (SCOPUS Indexed) DOI 10.1007/s41870-021-00844-2	Javaid Iqbal , Tabasum Firdous, A. K. Shrivastava, and Iqra Saraf	Springer	2022

8.	"Modelling reliability growth for multi-version open source software considering varied testing and debugging factors". In <i>Quality and Reliability Engineering International</i> , Wiley, (SCI Indexed)	Iqra Saraf, Javaid Iqbal. , A. K. Shrivastava, and Shozab Khurshid	Wiley	2021
9.	"Effort Based Fault Detection and Correction Modeling for Multi Release of Software" <i>International Journal of Information and Computer Security (IJICS)</i> , Inderscience, SCOPUS Indexed)	Iqra Saraf, A. K. Shrivastava, and Javaid Iqbal.	Inder Science	2021
10.	"PAD-A: performance antipattern detector for AADL" <i>International Journal of Information Technology</i> (2020): 1-10. Springer, SCOPUS Indexed)	Syed Abrar Ul Haq, Javaid Iqbal	Springer	2020
11.	"Generalised fault detection and correction modelling framework for multi-release of software." <i>International Journal of Industrial and Systems Engineering</i> 34.4 (2020): 464-493. Inderscience, (SCOPUS Indexed)	Saraf, Iqra, A. K. Shrivastava, and Javaid Iqbal	Inder Science	2020
12.	"Generalized multi-release modelling of software reliability growth models from the perspective of two types of imperfect debugging and change point." <i>Quality and Reliability Engineering International</i> 35.7 (2019): 2358-2370. Wiley (SCI Indexed)	Saraf, Iqra, and Javaid Iqbal.	Wiley	2019
13.	"Effort based software reliability model with fault reduction factor, change point and imperfect debugging." <i>International Journal of Information Technology</i> (2019): 1-10. Springer, (SCOPUS Indexed)	Khurshid, Shozab, A. K. Shrivastava, and Javaid Iqbal.	Springer	2019
14.	"Generalized software fault detection and correction modeling framework through imperfect debugging, error generation and change point." <i>International Journal of Information Technology</i> 11.4 (2019): 751-757. Springer, (SCOPUS Indexed)	Saraf, Iqra, and Javaid Iqbal.	Springer	2019

15.	Generalized Multi Release Framework for Fault Prediction in Open Source Software" <i>International Journal of Software Innovation (IJSI)</i> 7.4 (2019): 86-107 IGI-Global (SCI Indexed)	Khurshid, Shozab, A. K. Shrivastava, and Javaid Iqbal. "	IGI-Global	2019
16.	"Fault Prediction Modelling in Open Source Software Under Imperfect Debugging and Change-Point." <i>International Journal of Open Source Software and Processes (IJOSSP)</i> 9, no. 2 (2018): 1-17. IGI-Global, (SCOPUS Indexed)	Khurshid, Shozab, A. K. Shrivastava, and Javaid Iqbal.	IGI-Global	2018
17.	"Studies of Software Fault Detection and Correction Process from the Perspective of Debugging Time lag and Fault Dependency", <i>International Journal of Advance Research in Science and Engineering, IJARSE</i> , UGC Serial No: 47721	Iqra Saraf, Javaid Iqbal.	IJARSE	2018
18.	"Study of Imperfect Software Reliability Growth Models and Change Point Concept" <i>International Journal of Advance Research in Science and Engineering, IJARSE</i> , UGC Serial No: 47721	Khurshid, Shozab, Javaid Iqbal.	IJARSE	2018
19.	"Software reliability growth models: A comparison of linear and exponential fault content functions for study of imperfect debugging situations." <i>Cogent Engineering</i> , pp1-9 Taylor and Francis (SCI Indexed) This paper got Best Journal Paper Award	Javaid Iqbal	Taylor & Francis	2017
20.	"Applicability of Artificial Neural Networks in the Diagnosis of Renal Tuberculosis" <i>JK-Practitioner</i> 2017 (SCOPUS Indexed)	Tariq Rasool, Quadri, S. M. K., Javaid Iqbal	JK-Practitioner	2017
21.	" A Literature Review of Catastrophic Software Failures with Emphasis on Growing Position of Software Engineering Research" <i>Indian Journal Of Computer Science And Engineering</i> , 2017	Javaid Iqbal	Engg Journals Publications	2017
22.	" Analysis of Some Software Reliability Growth Models Using Failure Data of Real Time Control System" <i>Indian Journal Of Computer Science And Engineering</i> 2017	Javaid Iqbal	Engg Journals	2017

			Publicat ions	
23.	“Automatic Feedback Generation in Software Performance Engineering: A Review”. <i>Orient. J. Comp. Sci. and Technol</i> ;10(2)	Javaid Iqbal , Ul Haq S. A.		2017
24.	Analysis of Some Software Reliability Growth Models with Learning Effects” <i>I.J. Mathematical Sciences and Computing</i> , 2016, 3, 58-70	Javaid Iqbal	MECS Press	2016
25.	“On Way to Acquiring Reliability Growth in Software Systems” <i>International Journal of Computer Applications</i> (USA), Volume 10– No.5, pp. 41-47, June 2011.	Javaid Iqbal , Quadri, S. M. K., Tariq Rasool		2011

Research (Ph.D) Supervision & Experience

S.No	Ph.D Student Name	Ph.D/ M. Phil and Date of Registration	Research Thesis Title / Topic of Research	Status / Award date, if applicable
1.	Ms. Iqra Saraf	Ph.D	Modelling and Analysis of Software Fault Detection and Correction Process Considering Debugging Time Lag	Ph.D awarded (19-10-2019)
2.	Ms. Shozab Khurshid	Ph.D	Modelling Software Reliability Growth from the Perspective of Imperfect Debugging	Ph.D awarded (27-07-2019)
3.	Mr. Syed Abrar ul Haq	Ph.D	A New Architecture Based Approach for Improving Software Performance	PhD Awarded (09-06-2022)
4.	Mr. Muhamad Syeed Bhat	Ph.D	Developing an efficient software vulnerability discovery model for web browsers	Pursuing
5.	Mr. Waris Hamid Bhat	Ph.D	Development of a new reliability growth model for open source software	Pursuing
6.	Mr. Kh. Mohmad Shafi	Ph.D	Design of an Efficient Text-to-Speech Synthesizer for Kashmiri Language	Pursuing
7	Ms. Rabia Nazir	Ph.D	Developing a New Software Reliability Growth Model with Imperfect debugging and Testing Coverage	Pursuing
8	Ms. Urooja Manzoor	Ph.D	Development of a Cross-Project Software Fault Prediction Model Using Graph Neural Networks and Transfer Learning	Pursuing
9	Mr. Bilal Ahmad Wani	Ph.D/	Development of an Imbalance-Aware AI-Driven Technique for Code Smell Detection	Pursuing
10	Ms. Sabahat Ara	Ph.D/	Development of a Transformer-based Vulnerability Detection Model using Semantic Graph Learning for AI-Generated Code	Pursuing
11	Ms. Iqra Shakeel	Ph.D/	Design and Implementation of an Explainable Hybrid Classical-Quantum Machine	Pursuing

			Learning Approach for Software Reliability Prediction	
12	Mr. Aaqib Anayat	Ph.D/	Development of an Inter-Procedural Vulnerability Detection Model Based on Graph Learning for Source Code	Pursuing
13	Ms. Zainab Tasleem	PhD	Recently joined in 2026	Pursuing
8	Ms. Ruqaya Amin Tibetbaqal	M.Phil. /	Modelling and Analysis of Testing Domain Dependent Software Reliability Growth Models	M.Phil awarded (2019)

M.Tech. CS Dissertation Supervision

S.No	M.Tech CS Student Name (Enrollment No) Minor/ Major Disseration	M.Tech. CS Dissertation Title	Status (year of completion)
1.	Aafaq Mohi ud Din(16083110004)	Software Reliability Prediction Using Neural Network	Completed(2018)
2.	Javid Ahmad Ganie (16083110005) Rabia Latief Bhat (16083110010)	Travelling Salesman Problem using Genetic Algorithm	Completed(2018)
3.	Tahir Farooq Wani (17083110010)	Software Reliability Modeling Using PSO	Completed(2019)
4.	Mansha Manzoor Mir (17083110022)	A Study of Vulnerability Discovery Models	Completed(2019)
5.	Umar Farooq Allaie (17083110016)	Plant Leaf Recognition using Convolutional Neural Network	Completed(2020)
6.	Tabassum Firdous ((17083110005)	Software Vulnerability Analysis on Windows XP and Firefox	Completed(2020)
7.	Basrah Yousuf (18083110014) Minor	Software Reliability Modeling from the perspective of Learning effects	Completed(2020)
8.	Humaira Jan (18083110005) Minor	Software Vulnerability Analysis	Completed(2020)
9.	Basrah Yousuf (18083110014) Major	A study of Software Reliability Growth with Testing coverage - a research dissertation	Completed(2021)
10.	Humaira Jan (18083110005) Major	Modelling Software Vulnerability Correction Process Incorporating Time Lag - a research dissertation	Completed(2021)

11.	Refath Farooq (19083110013) Minor	Software Reliability growth Modeling Considering Imperfect Debugging for Multi Release Open source System- a research dissertation	Completed(2021)
12.	Nyla Manzoor (19083110021) Minor	A Testing-Coverage Software Reliability Model Considering Fault Removal Efficiency and error Generation - a research dissertation	Completed(2021)
13.	Refath Farooq (19083110013) Major	Analysis of Logistic Growth Model for Software Reliability Estimation Considering Testing Effort Function and Uncertain Factors- a research dissertation	Completed(2022)
14.	Nyla Manzoor (19083110021) Major	Integrating Testing Effort Functions and Uncertain Factors into Logistic Growth Model for Software Reliability Estimation- a research dissertation	Completed(2022)
15.	Zehra Ashraf (21083110006) Minor	Dynamic programming for determining optimal allocation of Testing Resource for modular Software System- a research dissertation	Completed(2023)
16.	Raziya Yousuf (21083110011) Minor	Testing Effort Dependent Inflection S shaped Software Reliability Growth Models with Imperfect Debugging- a research dissertation	Completed(2023)
17.	Anjum Rouf (21083110013) Minor	Modelling of NHPP Based Software Reliability Growth Model from the Perspective of Testing Coverage, Error Propagation and Fault Withdrawal Efficiency- a research dissertation	Completed(2023)
18.	Zehra Ashraf (21083110006) Major	Inflection S Shaped Software Reliability Growth Model with Burr Type XII and Log logistic Testing Effort Functions - a research dissertation	Completed(2023)
19.	Raziya Yousuf (21083110011) Major	Integrating Testing Effort Functions in Inflection S Shaped Software Reliability Growth Model - a research dissertation	Completed(2023)

20.	Anjum Rouf (21083110013) Major	Predictive Modelling For Survival Prediction of Breast Cancer Patients Based on Clinical Data Using Machine Learning - a research dissertation	Completed(2023)
21.	Afshan Mairaj (22083110002) Major	To develop a CNN based coronary artery disease detection method using CCTA images - a research dissertation	Completed September 2024
22.	Jazil Javeed (22083110006) Major	Enhancing Brain Tumour Classification through Augmentation of MRI Images Using Generative Adversial Networks (GAN) - a research dissertation	Completed September 2024
23.	Fatima Jan (22083110005) Major	Facial expression recognition using Deep Learning - a research dissertation	Completed September 2024

Conference Papers

1. **Javaid Iqbal**, "Studies of Software Fault Detection and Correction Process from the Perspective of Debugging Time lag and Fault Dependency" in 1st International Conference on Recent Developments in Science, Humanities & Management-2018 held between 17-18th April, 2018, at Amar Singh College, Cluster University Srinagar, India
2. **Javaid Iqbal**, "Study of Imperfect Software Reliability Growth models and Change Point Concept" in 1st International Conference on Recent Developments in Science, Humanities & Management-2018 held between 17-18th April, 2018, at Amar Singh College, Cluster University Srinagar, India.
3. Shozab Khurshid, Ruqaya Amin and **Javaid Iqbal**, "A Generalized Classification of Software Reliability Growth Models" In Computing for Sustainable Global Development (INDIACom), 2018 International Conference on, pp. 1175-1179. IEEE, 2018.
4. Iqra Saraf and **Javaid Iqbal**, "Studies in Software Fault Detection and Correction Process" In Computing for Sustainable Global Development (INDIACom), 2018 International Conference on, pp. 1084-1087. IEEE, 2018.
5. Syed Abrar Ul Haq and **Javaid Iqbal**, "Challenges in Automating Software Performance Evaluation of Component Based Software Architectures" In Computing for Sustainable Global Development (INDIACom), 2018 International Conference on, pp. 1193-1196. IEEE, 2018.
6. **Javaid Iqbal**, S.M.K Quadri and N. Ahmad "An imperfect-debugging model with learning-factor based fault-detection rate." In Computing for Sustainable Global Development (INDIACom), 2014 International Conference on, pp. 383-387. IEEE, 2014.
7. **Javaid Iqbal**, S.M.K Quadri and N. Ahmad "Software Reliability Modeling with Learning-Based Fault Detection Rate" at 2014 1st "International Conference on Recent Trends in Computer Science & Engineering" during 8-9 February, 2014 held at Department of Computer Science, Central University of Bihar, Patna. (Proceedings published by Narosa Publishing House)
8. **Javaid Iqbal**, N. Ahmad, S.M.K Quadri "A Software Reliability Growth Model with Two Types of learning" at 2013 IEEE International Conference on Machine Intelligence Research and Advancement, ICMIRA-2013, December 21st -23rd , 2013 held at Shri Mata Vaishno Devi University, Katra, J&K, India
9. **Javaid Iqbal**, N. Ahmad, S.M.K Quadri "A software reliability growth model with two types of learning and a negligence factor." In Image Information Processing (ICIIP), 2013 IEEE Second International Conference on, pp. 678-683. IEEE, 2013.

Personal Details:

Marital status : Married
Fathers Name : Mr. Mohd Muzaffar Shah
Language Known : English, Urdu, Kashmiri, Arabic
Nationality : Indian
Children : 1
References:

Name	Designation	Contact no	email
Prof S.M.K. Quadri	Former Head,(Computer Science), Jamia Milia Islamia, University New Delhi	+91-9419000383	quadrismk@hotmail.com
Prof Mohd Arif Wani	Former Head, (Computer Science) and Dean Engineering, Institute of Engineering University of Kashmir	+91-8803325398	awani@uok.edu.in

I hereby declare that all the above information is true to the best of my knowledge.

Date: 29-07-2026

Javaid Iqbal