Address: C/o Mohinder Paul, Kabir Colony, Ward no. 8, Near Water Works, Budhlada-151502, Punjab-India

E-mail: sumitbansal.cse@gkv.ac.in

Phone: +91-7355891000

SUMIT BANSAL

DOB: Jan 20, 1993 Nationality: Indian

Gender: Male

PROFILE

Result driven individual with excellent working experience, expertise in analysing, team management, motivational skills and communication skills. Ability of coordinating multiple activities simultaneously with ease. Demonstrate technical problems solving skills and can handle several critical situations with ease and grace.

EDUCATION

2019-present	Doctorate of Philosophy in Computer Science and Engineering
	» At Punjabi University Patiala, India
2015-2017	Master of Technology (Computer Engineering)
2012-2015	 » Punjabi University Patiala, India » With Distinction Bachelor of Technology (Computer Science and Engineering)
	» CGC, Landran, Mohali, India» Grade: First Division

AWARDS AND ACDEMICS ACHIVEMENTS

- » GATE Qualified (2015 & 2018), Percentile (95.45 & 88.50)
- » M.Tech. with Distinction
- » Best M.Tech. Thesis Award
- » Best Research Paper Awards

ACADEMIC / TEACHING EXPERIENCE

» Working as Assistant Professor in Computer Science & Engineering Department, Faculty of Engineering and Technology, Gurukula Kangri (Deemed to be University), Haridwar from 16 August 2019 to Present.

SUBJECTS TAUGHT

- » Cloud Computing
- » Distributed Systems
- » Computer Organization & Architecture

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- » Advanced Computer Architecture
- » Object Oriented Programming using C++

DEPARTMENTAL RESPONSIBILITIES

- » Co-organizing Secretary of One Week Online Short-Term Course on "Blockchain and Machine Learning"
- » Member of Garbhastra Committee
- » Member of **Discipline Committee**
- » Member of NAAC and NBA Committee
- » Member of SIH and Technical Team
- » Coordinated various workshops and seminars held in FET.
- » Guided various project of student of final year.
- » Got state level certification in Yoga.
- » Got Position and medal in Hack O' Crack.

RESEARCH AREA

Fog Computing, Cloud Computing, Fingerprint Recognition, Biometric Security

RESEARCH

Ph.D. Work (Feb'19 – Present)

Development of A Fog Based Computing System Using Efficient Scheduling Approach

- » Advisor/Guide: Dr. Himanshu Aggarwal
- » Institute: Department of Computer Engineering, Punjabi University, Patiala, India

Master Thesis (Jan'17 – Jun' 17)

Biometric Security with Password for Web Based Systems

- » Advisor: Er. Supreet Kaur
- » Institute: Department of Computer Engineering, Punjabi University, Patiala, India

RESEARCH PUBLICATIONS (SCI / SCOPUS / UGC-CARE)

- » Bansal, S., Aggarwal, H. (2022). A Systematic review of task scheduling approaches in Fog Computing. Transections on Emerging Telecommunications Technologies. doi:10.1002/ett.4523 (Scopus/SCIE Indexed) (IF-3.3)
- Bansal, S., Singh, R. (2020). A Comparative study of Image Deblurring Techniques. Journal of Computational and Theoretical Nanoscience (JCTN), 17(9), pp:4571-4579. ISSN-1546-1955. doi:10.1166/jctn.2020.9282 (Scopus Indexed)

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- » Bansal, S., Kaur, S. (2017). Biometric Security with password for Web Based Architecture. International Journal of Engineering Sciences, 26(6), pp:67-75. UGC S.No.63019, ISSN: 2229-6913 (Print). (UGC Approved)*
- » Bansal, S., Singh, B. (2017). A Review: Intrusion Detection System in Wireless Sensor Networks. International Journal of Computer Science and Mathematical Science (IJCMS), 6(6)., pp:13-19. ISSN-2347-8527 (UGC Approved)*

REVIEWER (SCI / SCOPUS / UGC-CARE)

- » Reviewer of "CMC-Computers, Materials & Continua" (IF-3.7) 2022 (SCOPUS/SCIE INDEXED)
- » Reviewer of "CMES-Computer Modelling in Engineering & Sciences" (IF-1.5) 2022 (SCOPUS/SCIE INDEXED)
- » Reviewer of "Computer Systems Science and Engineering" (IF-1.4) 2022. (SCOPUS/SCIE INDEXED)
- » Reviewer of "Intelligent Automation & Soft Computing" (IF-1.6) 2022. (SCOPUS/SCIE INDEXED)

BOOK CHAPTER / BOOKS

- » Bansal, S., Aggarwal, M., Aggarwal, H., book chapter for the book "Cloud, IoT and Social Networks: Security, Solutions and Applications" published by *Scrivener publishing*, Wiley, Oct, 2019, page no. 207-237. ISBN: 978-1-119-59226-6 DOI: https://doi.org/10.1002/9781119593171.ch14
- Bansal, S., Aggarwal, M., Aggarwal, H., published a Text book on "Handbook of Amazon Web Services (A Practical Guide)" is published by *BlueRose Publishers Pvt. Ltd., Delhi, London.* with ISBN-10 9356110212 ISBN-13: 978-9356110212 on dated Feb, 2022. (Available on: Flipkart, Amazon, BlueRose etc.) Link: shorturl.at/vDGY2

CONFERENCES PUBLICATIONS (SCOPUS / UGC-CARE)

- Bansal, S., Tyagi, A., presented a research paper on "A Proposed technique of security for E-Commerce using Biometric" in the *International conference on Multidisciplinary Research and Innovative Practices* on 26-27 Nov, 2021 organized by J.S. University, Shikohabad, Firozabad. (UGC-CARE)
- » Bansal, S., Aggarwal, H., presented research paper on "Random Cloudlet Priority Scheduling: An Enhanced Approach" in the *International conference on Computational Intelligence in Analytics and Information Systems* in 02-03 April, 2021 organized by department of Computer Science and Technology, Manav Rachna University, Faridabad. (SCI/Scopus/UGC-CARE)
- » Bansal, S., Aggarwal, H., presented research paper "A Survey on: iFog CloudSim a proposed toolkit to enhancing the resource allocation" in the National conference on Big Data Analytics on 16-17 march, 2018, Pricharcha-

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2018 organized by Department of Computer Science & Applications, Chaudhary Ranbir Singh University (Jind).

- » Bansal, S., Aggarwal, H., Aggarwal, M., presented research paper "A Survey on: iFog CloudSim a proposed toolkit for enhancing the resource allocation and computational process in cloud computing" in the 3rd International Conference on international conference on Computing, Communication, Network and Security (IC3NS-2018) (23-24 Feb, 2018) organized by College of Engineering and Technology, Mody University, Lakshmangarh, Sikar, Rajasthan, India. (SCOPUS/UGC-CARE)
- » Bansal, S., Kaur, S., presented research paper "Safe and Secure Payment Steps on E-commerce Websites" in the National Conference on Recent Trends in Computing and Communication Technologies, (29-30 Sept, 2016), RCCT-2016 organized by Department of Computer Science and Engineering, Deenbandhu Chhotu Ram University of Science and Technology, Murthal, Sonepat, Haryana, India.
- » Bansal, S., Kaur, S., presented research paper "A Review: Biometric Security Mechanism in E-Commerce", in the *International conference on recent trends in computing*, (30-31, August, 2016) organised by Department of Computer Engineering, Punjabi University, Patiala. (UGC)
- » Bansal, S., Wadhwa, M., Kaur, A., presented research paper "Study on: Industrial Electricity Consumption using Neural Network in Data Mining", in the International conference on recent trends in computing, (30-31 Aug, 2016) organised by Department of Computer Engineering, Punjabi University, Patiala. (UGC)

PATENTS (INDIAN/INTERNATIONAL)

- » Bansal, S., Aggarwal, M., Singh, N., published an Indian patent on "System and Method For Reporting Information Related to Drug Trafficking Anonymously" patent number 202211029346 application date 21.05.2022
- » Bansal, S., Aggarwal, M., Aggarwal, H., published an Australian patent on "A Cloud-Fog Based Architecture For Smart Healthcare System For Industry And Society Purpose" patent number 2021107417 publication date 23.12.2021
- » Bansal, S., Willian, P., Aruna, V., Painuli, D., published an Indian patent on "Soft Fairness Based Scheduling Mechanism Using Machine Learning For Cloud Computing" patent number 202141039379 on dated 31.08.2021

LECTURE DELIVERED

Delivered a lecture in Teacher-Learning workshop on the topic "Smart Board + Google Class" on 24 Aug, 2021 in Gurukula Kangri, Faculty of Engineering & Technology.

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CERTIFICATION

» Completed certification of "Cloudsim Tutorials" from Superwits Academy on 23 Aug, 2020.

» Completed certification of "Essential iFogSim Tutorials" from *Superwits Academy* on 25 June, 2021.

WORKSHOP'S/FDP'S

- » Completed One-week AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Integration of Renewable Energy and Smart Grids for Smart Cities" from 07.03.2022 to 12.03.2022 at Bansal Institute of Engineering and Technology Lucknow (U.P.) India.
- » Completed One-week AICTE Training And Learning (ATAL) Academy Online Elementary FDP on "Fog and Edge Computing Challenges and Research Directions" from 25.09.2021 to 29.09.2021 at National Institute of Technology, Sikkim.
- » Completed One-week AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Stress Management" from 13.09.2021 to 17.09.2021 at VNR Vignana Jyothi Institute of Engineering and Technology.
- » Completed One-week AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "IoT & Cyber Security" from 06.09.2021 to 10.09.2021 at Institute of Engineering & Management.
- » Completed One-week AICTE Training And Learning (ATAL) Academy Online Advanced FDP on "Cryptocurrency and Blockchain Technology" from 30.08.2021 to 03.09.2021 at Punjab Engineering College.
- » Completed One-week FDP on "Advanced Research Methodology & Writing of High Quality Research Papers" organised by Department of Management Studies & Department of Mechanical Engineering, Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur from 24.08.2021 to 28.08.2021.
- » Completed One-week FDP on "Advance Tools in Research" organized by office of Dean Research in association with IQAC, Mata Gujri College, Fatehgarh Sahib from 18.01.2021 to 25.01.2021.
- » Completed AICTE sponsored Six days online short-term training program (STTP)-Phase II on "Research Confront and Document Typesetting using LaTex:202X" organized by Department of Electronics and Communication Engineering, ABES Institute of Technology, Ghaziabad from 25.01.2021 to 01.02.2021.
- » Completed the 5-day online FDP on the theme "Inculcating Universal Human Values in Technical Education" organized by All India Council for Technical Education(AICTE) from 15.03.2021 to 19.03.2021.
- » Completed One-week FDP on topic "Control Systems & Sensors Technology" organized by the AICTE Training and Learning (ATAL) Academy, at Bhilai Institute of Technology, Durg from 02.11.2020 to 06.11.2020.

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- » Completed One-week FDP on topic "Internet of Things (IoT)" organized by the AICTE Training and Learning (ATAL) Academy, at Indian Institute of Technology (BHU) from 21.09.2020 to 25.09.2020.
- » Certificate of Webinar on "Cyber Attacks: A Severe Threat to Humanity", organized by Department of Computer Science, D.M. College, Moga, on 24.08.2020.
- » Certificate of E-Quiz on "Swacch Bharat" organized by NSS UNIT of Baba Banda Singh Bahadur Engineering College, Fatehgarh Sahib, on 02.10.2020.
- » Completed One-week workshop on topic "Internet of Things (IoT) Enabled Devices in Various Domain of Engineering" organized by the Department of Computer Science & Engineering, B. T. Kumaon Institute of Technology, Dwarahat, Almora (Uttarakhand) sponsored by Uttarakhand Science Education and Research Center (USERC), Uttarakhand & TEQIP-III, B. T. Kumaon Institute of Technology, Dwarahat, Almora (Uttarakhand) from 21.09.2020 to 25.09.2020.
- » Certificate of Webinar on "Cyber Attacks: A severe Threat to Humanity", organized by Department of Computer Science, D.M. College, Moga, on 24.08.2020
- » Completed Faculty Development Program (FDP) on topic "Blockchain and Machine Learning" organized by the Department of Computer Engineering, Faculty of Engineering and Technology, Gurukula Kangri Vishwavidyalaya, Haridwar in Technical Collaboration with IBM & AICTE from 29.06.2020 to 03.07.2020.
- » Certificate of National Webinar on "Stress Management", organized by Ek Bharat Shresth Bharat Cell, Faculty of Engineering & Technology, Gurukula Kangri Vishwavidyalaya, Haridwar on 27.06.2020.
- » Certificate of National Webinar on "Effects of Fear among the Organization", organized by Faculty of Engineering & Technology, with joint collaboration of CAOC & SWAYAM Committee, Gurukula Kangri Vishwavidyalaya, Haridwar on 09.06.2020.
- Sompleted Faculty Development Program (FDP) on topic "Cyber Security" Organized by the Department of Computer Science and Engineering, St. Mary's Group of Institutions, Guntur, Chebrolu (V&M) during the period 28.05.2020 to 01.06.2020 in association with Supraja Technologies.
- » Certificate of Webinar on "Biometrics and Face Recognition During Pandemic Covid-19", B. S. ANANGPURIA EDUCATIONAL INSTITUTES Alampur, Ballabgarh Sohna Road, Faridabad-121004, Haryana on 30.05.2020.
- » Completed e-Faculty Development Program (eFDP) on "Virtual Teaching-Learning MOODLE the Efficient way" organized by the Faculty of Humanities and Science, Dr. MGR Educational and Research Institute, Adayalampattu Phase -II Campus, Chennai from 29.05.2020 to 30.05.2020.
- » Completed Faculty Development Program (FDP) on topic "Exploring Research Challenges and Opportunities in Science & Technology" organized

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by the Department of Computer Engineering, Lokmanya Tilak College of Engineering from 27.05.2020 to 29.05.2020.

- » Participation certificate of National Webinar on "Application of Artificial Intelligence in Present scenario", organized by Faculty of Engineering and Technology, in association with SWAYAM committee, Gurukula Kangri Vishwavidyalaya, Haridwar on 27.05.2020.
- » Completed Short Term Training (STC) Programme through ICT mode "Programming in C++ Methodologies" organized by NITTTR, Kolkata from 20.04.2020 to 24.04.2020.
- » Completed Faculty Development Program (FDP) on topic "Cloud, Fog and Edge Computing" conducted by Computer Science and Engineering Department from 14/04/2020 to 18/04/2020 at NITTTR, Chandigarh.
- » Participated in One-week Short Term Course (STC) on "Cloud Computing and CloudSim Simulator" at NITTTR Chandigarh, Punjab, India (April., 2018)
- » Participated in two-day workshop on "Cloud Computing" at Department of Computer Engineering, Punjabi University, Patiala, Punjab, India
- » Participated in one day Workshop on "Linux" by Ducat, Noida at Punjabi University, Patiala, Punjab, India (March, 2016)
- » Participated in two-day workshop on "Python" by Ducat, Noida at Punjabi University, Patiala, Punjab, India (Aug, 2018)
- » Certificate of National Webinar on "Modern Methods for Remote Teaching -Learning Practices", organized by Faculty of Engineering & Technology, in association with SWAYAM-NPTEL Committee, GKV, Haridwar on 25.05.2020.
- » Certificate of Webinar on "Walkthrough on Payment Systems in India" conducted on 23.05.2020 by the Department of Computer Science and Engineering, SRM TRP Engineering college, Trichy
- » Certificate of Webinar on "Need of IoT for Modern Electrical Engineer", SRM Institute of Science and Technology, Chennai organized by Department of Electrical and Electronics Engineering on 21.05.2020.
- » Certificate of Webinar on "Enduring trends in Mobile Robotics: Present & Future" presented by Dr. Somashekhar S. Hiremath/IIT Madras organized by Chennai Institute of Technology on 19.05.2020.
- » Certificate of Online Webinar on "Indian Food Processing Industry: Goldmine for Entrepreneurship Opportunities", organized by Department of Computer Science & Engineering, in collaboration with Entrepreneurship Cell, Faculty of Engineering & Technology, Gurukula Kangri Vishwavidyalaya, Haridwar on 04.05.2020.
- » Certificate of Competition the explore ML Beginner Track from Google.
- » Certificate for Completion of LaTeX test organized at Aarupadai Veedu Institute of Technology by PRAVEEN R with course material provided by the Spoken Tutorial Project, IIT Bombay

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» Certificate of Attended Lecture on "Introduction to AWS RoboMaker (60 minutes)", AWS Educate.

TECHNICAL SKILLS

» OS / Software / Tools: Linux, Window's 7/8/10, CloudSim, FileZilla, Apache Server, IIS
 » Programming (Internet Information Server), JCreator, NetBeans, Photoshop CS,

Languages Prezi

Technologies C, C++, HTML5, CSS, MySQL, MS-Access, JAVA

COMMUNICATION SKILLS

- » English
- » Hindi
- » Punjabi