**Brief Biography**

Dr. Arun Solanki is currently working as an *Assistant Professor* in the *Department of Computer Science and Engineering*, Gautam Buddha University, Greater Noida, India. He is also *Co-Convener of the Center of Excellence in Artificial Intelligence*. Dr. Solanki has worked as Time Table Coordinator, member examination, admission, sports council, digital information cell, and other university teams from time to time. He has received M.Tech. Degree in Computer Engineering from YMCA University, Faridabad, Haryana, India. He has received his Ph.D. in Computer Science and Engineering from Gautam Buddha University in 2014. He has supervised more than 80 M.Tech. Dissertations. Currently, he is guiding 5 Ph.D. students in the area of Artificial Intelligence. His research interests span Expert systems, Machine Learning, and Search Engines. He has published more than 70 research articles in SCI/ Scopus indexed International journals/conferences like IEEE, Elsevier, Springer, etc. He has physically participated in many national and international conferences. He has been a technical and advisory committee member of many international conferences. He has organized several FDP, Conferences, Workshops, and Seminars. He has chaired many sessions at International Conferences. Arun Solanki was working as Associate Editor in International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)” IGI publisher (Scopus indexed). He worked as Guest Editor for special issues in Recent Patents on Computer Science, Bentham Science Publishers. Arun Solanki has published more than 10 Books with a reputed publisher like IGI Global, CRC, Elsevier and AAP. He works as a reviewer in Springer, Wiley, MDPI, IGI Global, Elsevier, and other reputed publishers SCI/Scopus journals.

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**JOURNAL PUBLICATIONS**

**(2022-23)**

* T Singh, A Solanki, SK Sharma, NZ Jhanjhi, RM Ghoniem ” [Grey Wolf Optimization Based CNN-LSTM Network for the Prediction of Energy Consumption in Smart Home Environment](https://ieeexplore.ieee.org/abstract/document/10238710), IEEE Access, 2023.
* S Kumar, A Solanki ” [An abstractive text summarization technique using transformer model with self-attention mechanism](https://link.springer.com/article/10.1007/s00521-023-08687-7)“, Neural Computing and Applications, 1-20.
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**(2019-20)**

* Diwaker C ; Tomar P; **Solanki A**; Nayyar A; Jhanjhi NZ; Abdullah A and Supramaniam M (2019) “A New Model for Predicting Component-Based Software Reliability Using Soft Computing” IEEE Access, Vol 7, 147191- 147203 SCI Impact Factor = 4.09
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* **A. Solanki** and A. kumar , “A system to transform natural language queries into SQL queries”, International Journal of Information Technology (Springer Publication), pp. 1-10, 2018, DOI:https://doi.org/10.1007/s41870-018-0095-2, Print ISSN: 2511-2104, Online ISSN2511-2112.

**CONFERENCE PUBLICATION**

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* T Singh, A Solanki, SK Sharma, “[Predictive Analysis of Energy Consumption for Energy Management in Smart Homes](https://scholar.google.co.in/citations?view_op=view_citation&hl=en&user=lJUCGWkAAAAJ&sortby=pubdate&citation_for_view=lJUCGWkAAAAJ:eJXPG6dFmWUC)“, Information and Communication Technology for Competitive Strategies (ICTCS 2022) Intelligent Strategies for ICT, Springer Nature Singapore, 2023.
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* R. Kumar, **A. Solanki**, “A Path Routing Alorithm for Moving Physical Bodies Using Genetic Algorithm and Physics Engine”, Journal of Asian Urban Enviornment, Annual 2018
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* Saxena, R. and Solanki**, A.** (2020). “[Text Classification Using Self-Structure Extended Multinomial Naive Bayes](https://www.igi-global.com/chapter/text-classification-using-self-structure-extended-multinomial-naive-bayes/247561)” Handbook of Research on Emerging Trends and Applications of Machine Learning, 107-129, IGI Global. (Published)
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* Malik, N. and **Solanki, A.** (2020). “Simulation of Human Brain: Artificial Intelligence-Based Learning”, Impact of AI Technologies on Teaching, Learning, and Research in Higher Education, 150-160, IGI Global (Published)
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* Singh, T.; **Solanki, A.** and Sharma, SK (2020)., “Role of Smart Buildings in Smart City - Components, Technology, Indicators, Challenges, Future Research Opportunities” Wiley Scopus (Published)
* **Solanki, A.** and Singh, T. (2021) “[COVID-19 Epidemic Analysis and Prediction Using Machine Learning Algorithms](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7979218/)“, Emerging Technologies for Battling Covid-19, Volume 324, Pages 57, Nature Publishing Group.
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Digital Solutions for Diverse Industries (In Press).
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* Rudra Rameshwar, Arun Solanki, [Anand Nayyar](https://www.igi-global.com/affiliate/anand-nayyar/346831/), Bandana Mahapatra, ” Green and Smart Buildings: A Key to Sustainable Global Solutions” Publication in the edited book” Green Building Management and Smart Automation” with IGI Global U.S.A., 2020, pp. 146-163,  DOI: 10.4018/978-1-5225-9754-4.ch007

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* A. Solanki, A., & Kumar, E. (2018). Study and Analysis of Delay Factors of Delhi Metro Using Data Sciences and Social Media: Automatic Delay Prediction System for Delhi Metro. In S. Kohli, A. Kumar, J. Easton, & C. Roberts (Eds.), Innovative Applications of Big Data in the Railway Industry (pp. 209-223). Hershey, PA: IGI Global. doi:10.4018/978-1-5225-3176-0.ch00
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**(2019-2020)**

* Gaur, L.; **Solanki,** **A.** and Jain,V. (2020). “Handbook of Research on Engineering Innovations and Technology Management in Organizations,” IGI Global, ISBN-10: 1799827720, 488 Pages. (Published)
* **Solanki**, A.; Poonia, S. and Nayyar, A. (2020). “Handbook of Research on Emerging Trends and Applications of Machine learning” IGI Global, ISBN-10: 1522596437, 1000 Pages. (Published)

## Jain, V; Tayal, A.; Singh J. and Solanki, A. (2020). “Cognitive Computing Systems: Applications and Technological Advancements” CRC and Taylor and Francis, ISBN 9781771889315

## Solanki, A.; Nayyar, A. and Naved, M. (2020). “[Generative Adversarial Networks for Image-to-Image Translation](https://www.amazon.in/Generative-Adversarial-Networks-Image-Translation/dp/0128235195/ref%3Dsr_1_6?dchild=1&qid=1614619245&refinements=p_27%3AArun+Solanki&s=books&sr=1-6)” Elsevier,  ISBN: 9780128236130

**(2020-21)**

* [Gupta](https://www.routledge.com/search?author=Meenu%20Gupta) M.; [Jain](https://www.routledge.com/search?author=Rachna%20Jain), R.; [**Solanki**](https://www.routledge.com/search?author=Arun%20Solanki)**, A.** and [Al-Turjman](https://www.routledge.com/search?author=Fadi%20Al-Turjman), F. (2021) “ Cancer Prediction for Industrial IoT 4.0 A Machine Learning Perspective” CRC Press, ISBN 9781032028781
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* [Gaur](https://www.routledge.com/search?author=Loveleen%20Gaur), L.; [**Solanki**](https://www.routledge.com/search?author=Arun%20Solanki)**, A.;** [Wamba](https://www.routledge.com/search?author=Samuel%20Fosso%20Wamba), S. F., [Jhanjhi](https://www.routledge.com/search?author=Noor%20Zaman%20Jhanjhi), N. Z.(2021) “Advanced AI Techniques and Applications in Bioinformatics” CRC Press, ISBN 9780367641696

**(2021-22)**

## Solanki, A.; Kumar, A. and Nayyar, A (2021). “Digital Cities Roadmap: IoT-Based Architecture and Sustainable Buildings (Advances in Learning Analytics for Intelligent Cloud-IoT Systems)” Wiley, ISBN: 978-1-119-79205-5.

* **Solanki**, A.; Jain, V; and Gaur, L. (2021) “Applications of Blockchain and Big IoT Systems Digital Solutions for Diverse Industries” CRC Press, ISBN 9781774637456
* **Solanki**, A.; Tarar, S.; Singh, S. and Tayal, A. (2021). “The Internet of Drones AI Applications for Smart Solutions” CRC Press, **ISBN:** 9781774639856

**Editorial**

**(2019-20)**

* **Solanki, A. and Jain D. K.** (2020) “[Emerging Trends and Applications in Cognitive Computing](https://www.ingentaconnect.com/contentone/ben/rascs/2020/00000013/00000005/art00003)” Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science), Bentham Science, vol 13, issue 5, pages 812-817 .

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* [**Solanki, A.** (2021) “Role of Cloud Computing, Big Data and Machine Learning in IoT Revolution” Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science), Bentham Science,](https://benthamscience.com/journals/recent-advances-in-computer-science-and-communications/volume/14/issue/3/page/666/), [14](https://benthamscience.com/journals/recent-advances-in-computer-science-and-communications/volume/14/)([3](https://benthamscience.com/journals/recent-advances-in-computer-science-and-communications/volume/14/issue/3/)): [666](https://benthamscience.com/journals/recent-advances-in-computer-science-and-communications/volume/14/issue/3/page/666/) – 668 .
* [**Solanki, A.** (2021) “Metaheuristics for Engineering Optimization” Recent Advances in Computer Science and Communications (Formerly: Recent Patents on Computer Science), Bentham Science,](https://benthamscience.com/journals/recent-advances-in-computer-science-and-communications/volume/14/issue/3/page/666/) Volume 14, Issue 2.

**CHAIR SESSION IN CONFERENCES**

**International (2020-21)**

Solanki, A. (2020) Chaired Technical Session -1 Day 1 in the Fourth International Conference on advance informatics for computing research (ICAICR-2020), Naimbia University of Science and Technology, Naimbia, held at Gurugram 26-27 December 2020, India.

Solanki, A. (2020) Chaired Technical Session -23 Day 3 in Online International Conference on Advancements in Interdisciplinary Research (ICAIR 2020), Amity University, Noida, held at July 24 – 26, 2020, India

**National**

Solanki, A. (2020) Chaired a Technical Session -1 Day 1 in National Seminar in ICT in Education Sector: Implication and Challenges on 18 Feb 2020 at Govt. College Narnaul, Haryana India.

**Expert Lectures (2020-21)**

Solanki, A. (2020) Delivered an Online Invited Talk in FDP organised by AKG College of Engineering “ Research Problems and Available Online Solution ” on 08th June 2022.

Solanki, A. (2020) Delivered an Invited Talk “Teaching in Digital Age” Webinar on Online Teaching, Learning and Evaluation During COVID-19 held on 19/06/2020, organized by Department of Computer Science, Government College, Narnaul, Haryana, INDIA.

Solanki, A. (2020) Delivered an Invited Talk “Teaching Learning Collaboration through Online Tools” in the Webinar on Online Teaching, Evaluation and Admin Options under Lockdown and Their Efficacy held on 14/04/2020, organized by Department of Computer Science and Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, 201312, Uttar Pradesh, INDIA.

Solanki, A. (2020) Delivered an Invited Talk “ Artificial Intelligence and its Application in Education” on October 16, 2020 to B.Ed. and M.Ed. students of School of Education, Galgotias University.

Solanki, A. (2020) Delivered an Invited Talk in FDP sponsored by AICTE “ Recommendation Systems: Present, Past And Future ” on 17th Dec 2020 at Dr. D.Y. Patil Institute of Engineering , pune India.

 **PATENTS**

**Granted(Australian Patent)**

**(2020-21)**

* 1. “Edge Preserving Image Smoothing Benchmark System with Deep Convolutional Neural Network” in “Australian Patent”, Patent number: 2020102385, Year: 2020
	2. “Solar Assisted System and Method for Water De-Fluoridation” in “Australian Patent”, Patent number: 2021103219, Year: 2021

 **Published (Indian patent)**

 **(2021-22)**

1. IoT Based Real time Automated Air Purifier. Application Number: 202121027845
2. A Novel Solar Assisted Defluouridation Device Using Langmuir Isothermal Model for Fluoride Free Drinking water. Application Number: 202131026317

**Copyrights (Indian)**

1. IoT Based Neonatal Caddy, Copyright granted on 10.12.2021 by deputy registrar of Copyright with registration Number: **L-112894/2022**
2. IoT Based Real-Time Automated Air Purifier, Copyright published on 22.6.2021 with registration number: **367430-001**

 **WORKSHOP/SEMINAR/WEBINAR ORGANISED**

 **(2020-21)**

Solanki, A. (2020) Webinar on Data Science and Machine Learning using Python organized by the Department of Computer Science and Engineering, School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA in collaboration with Mapping Skill, Greater Noida, UP, INDIA.

Solanki, A. (2020) Webinar on Data Science and Machine Learning organized by the Department of Computer Science and Engineering, School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA in collaboration with Mapping Skill, Greater Noida, U.P., INDIA.

Solanki, A. (2020) Webinar on Blockchain Technology for New Era of Higher Education organized by the Department of Computer Science and Engineering, School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA.

Solanki, A. (2020) Webinar on Machine Learning Using Python organized by the Department of Computer Science and Engineering, School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA in Collaboration with DUCAT.

Solanki, A. (2020) Startup Ideas for Software and AI Products organized by the Department of Computer Science and Engineering, School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA.

Solanki, A. (2020) One week Online Expert Series organized Gautam Buddha University in collaboration with Department of Computer Science and Engineering, School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA.

Solanki, A. (2020) One Week 4th One Week Programming Competition and Challenge War (Techovation 2020), organized by the School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA.

Solanki, A. (2020) One Day Workshop on Python, organized by the University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA.

Solanki, A. (2020) One Day Webinar on Art of Writing Research Paper, organized by the University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, India.

Solanki, A. (2020) Online Expert Lecture Series organized by the University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, India.

 **CONFERENCES ORGANISED**

 **(2020-21)**

Solanki, A. (2020) Two Days 1st Online International Conference on Rebuilding Bharat with Artificial Intelligence (AI) Interventions after COVID-19 Pandemic: Opportunity and Challenges School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA.

Act as a convener for 1st International Conference on “Artificial Intelligence and Sustainable Computing for Smart Cities”. The conference proceeding is published in CCIS Series of Springer Publication which is Scopus indexed.

 **FDP/STTP ORGANISED**

 **(2020-21)**

Solanki, A. (2020) One Week AICTE sponsored ATAL FDP on Cyber Security and Forensics” organized by the Department of Computer Science and Engineering & Department of Electronics and Communication Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, U.P., INDIA.

Solanki, A. (2020) Two Week Online Short Term Training Programme in Research Methodology organized by the Department of Computer Science and Engineering & Department of Electronics and Communication Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, U.P., INDIA.

 **WORKSHOP/SEMINAR/WEBINAR ATTENDEND**

 **(2020-21)**

Solanki, A. (2020) participated in the Webinar on COVID-19 Disruption to Infiltrate Organisations Networks - No Mercy From Cyber Hackers held on 12/05/2020, organized by Department of Computer Science and Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, 201312, Uttar Pradesh, INDIA.

Solanki, A. (2020) participated in the Webinar on Artificial Intelligence using PYTHON held on 09/06/2020, organized by, Artificial Intelligence Study Circle, Department of Computer Science and Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, 201312, Uttar Pradesh, INDIA in collaboration with Mapping Skill, Greater Noida, U.P., INDIA.

Solanki, A. (2020) participated in the Webinar on Environmental Impact of Covid-19 Lockdown and Strategies to Sustain in Future held on 08/06/2020, organized by Department of Environmental Science, University School of Vocational Studies and Applied Sciences, in collaboration with Department of Computer Science and Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, 201312, Uttar Pradesh, INDIA.

Solanki, A. (2020) participated in the Webinar on Data Science and Machine learning using PYTHON held on 10/06/2020, organized by, Cognitive Computing Study Circle, Department of Computer Science and Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, 201312, Uttar Pradesh, INDIA in collaboration with Mapping Skill, Greater Noida, U.P., INDIA

Solanki, A. (2020) participated in the “Water Sampling Using Unmanned Autonomous Guided” on May 31, 2020 organized by Department of Electronics and Communication Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida 201312, Uttar Pradesh, INDIA.

Solanki, A. (2020) participated in the two days FDP Program on “Emerging Threats in Network Security (ETNS-2021) 12-13 June 2021” organized by Faculty of Engineering, Design and Automation, GNA University, Phagwara, Punjab, India.

 **FDP/STTP ATTENDEND**

 **(2020-21)**

Solanki, A. (2020) participated in the Two Week Online Short Term Training Programme on Research Methodology, held during July 06-18, 2020, organized by, Department of Computer Science & Engineering and Department of Electronics & Communication Engineering, University School of Information and Communication Technology, Gautam Buddha University, Greater Noida, Uttar Pradesh, INDIA.

Solanki, A. (2020) participated in the five-day online Faculty Development Programme on “Advances In Computational Intelligence & Machine Learning Applications” held from 4th - 8th May 2020 at AMITY UNIVERSITY UTTAR PRADESH, NOIDA.

Solanki, A. (2020) participated in Training Programme for Engineers on Intellectual Property Rights Organised by IP Assisto on 23rd May 2020.

Solanki, A. (2020) One Week Online Lecture Series organized by the Cognitive Computing Study Circle, Department of Computer Science and Engineering, School of Information and Communication Technology, Gautam Buddha University, Greater Noida, UP, INDIA.

Solanki, A. (2020) One week online short-term course on Emerging trends in Power and Energy systems, 24-28 August 2020, organized by department of electrical engineering, Gautam Buddha University, Greater Noida.

Solanki, A. (2020) attended the one-week international short term training program on “Blockchain Technology, Research Avenues, and its Applications” organized by the Department of Computer Science and Engineering, Institute of Technology, Nirma University, Ahmedabad, India during 12 th-17 th July 2021.

**Awards**

**(2021-22)**

Dr. Arun Solanki was conferred with the Best Academician of the Year award by SEMS Welfare Foundation on 9th April, 2022

**Participation as member or as an advisor in Conferences**

**(2020-21)**

Served as TPC member at COMNETSAT 2020 (Batam, 17-18 December 2020).

Served as Organizing Committee of EAI SaSeIoT 2021, as All Tracks - Program Committee Member.

Served as Member of Advisory Board/ Technical Program Committee (TPC) for 2nd International Conference on Communication and Intelligent Systems.

Served as member of Advisory Board/ Technical Program Committee (TPC) for ICCCT 2021.

Served as member of Advisory Committee for Congress on Intelligent Systems (CIS) Organized by Soft Computing Research Society.

Served as member of the National Advisory Committee for 3rd International Conference on Sustainable Computing (SUSCOM 2021).

Served as member of our advisory committee in 4th International Conference on Emerging Trends in Science, Technology and Mathematics -ICETSTM'21.

Served as a member of Advisory committee for ICICIT-2021.

 **Expert for Dissertation/Viva-Voce/ Academic Council (Online)**

 **(2020-21)**

 Worked as an external examiner for M. Tech. (CSE) Dissertation (online) at CDAC Noida.

 Member of Academic Council, IILM University, Gurugram.

**PH.D. Supervisor**

1. Tarana SIngh, (2020)

Thesis Title: A Novel Smart Energy Management System Using Internet Of Things And Machine Learning For Smart City Power Management(RDC Completed)

1. Rajesh (2020-21)

Thesis Title: Studies in De novo domestication of wild tomato for increased fruit size using genome editing

1. Sandeep Kumar (2020-21)
2. Vineet Kumar (2020-21)

 **School and Admin Level Responsibilities**

* + Working as Time Table coordinator in 2018-till date.
	+ Worked as a member in the selection panel of guest faculty in CSE department.
	+ Worked as a Special invitee in BoS held in 2020.
	+ Worked as a member in Ph.D. selection panel (interview) held in 2020.
	+ Faculty Coordinator, Online feedback form.
	+ Committee Member, Registration process of School of ICT students.
	+ Member of Major Project Panel.
	+ Member of Summer Training Panel.
	+ Member of Minor Project Panel.
	+ Member of Dissertation Panel.
	+ Professor in-charge (ICT) for Expert System Lab.
	+ Working as Co-Convener in Centre of excellence for Artificial Intelligence in 2020.
	+ Working as a Member in “Equipment Evaluation and Facilitation” team.
	+ Member of “Technology Exploration, Identification and Adoption Committee” as per office order: gbu-010/acad./021/2020-38
	+ Member of University placement committee.
	+ Working as Member Admission Committee in 2016-till date.
	+ Working as member of Digital Information Cell in 2016- till date.
	+ Worked as a member (Vice-chancellor Nominee) in the selection panel of SOVSAS in 2020.