RESUME

SHAJULIN BENEDICT
Associate Professor || Senior IEEE Member,
Faculty Incharge (R&D and International Affairs),
Indian Institute of Information Technology Kottayam,
Valavoor P.O, Kottayam District, Kerala – 686635.
(Guest Professor – TUM-Germany),
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EDUCATION :

- **Technische Universitat Muenchen, Germany,** Faculty of Informatics I10, April 2009-March 2011, Post Doctorate.
- **Anna University**, Faculty of Information and Communication Engineering, Jun2004-Oct2008, **Ph.D** in the topic ON SCHEDULING IN GRID COMPUTING**.**
- **Anna University**, Faculty of Information and Communication Engineering, Jun 2002- May 2004, Master of Engineering.

AWARDS / ACHIEVEMENTS :

- **DAAD Research Ambassador** – 2022 to 2025.
- **MeluXina Early Access Award --** for title "Deep Learning-Assisted Predictions for Energy Tuning of HPC Applications" from Luxembourg, Europe, 4.5.2021.
- **Best Paper Award --** ISIC 2021 (Indo-German Conference)**,** 5th SIRS 2019, Springer ACN.
- **Mentor of Change** – AIM (NITI Aayog – Mentor-India program), Govt. of India.
- **Jury**-Global (Entrepreneurial Award), Platinum (2021), Silver (2022) – Wadhwani Foundation, USA.
- **IEEE Brand Ambassador** – since 2020.
- **University Rank Holder** (Master of Engineering, Anna University-Chennai, 2002-2004 Batch)
- **Organizing Chair** for IEEE International Conference on Green High Performance Computing (ICGHPC'13 and ICGHPC'16 – DBLP/GoogleScholar/Scopus indexed)
- **Travel Grants Awardee:** ICC2014, Oman (by DST,India), Dagstuhl Seminar, Germany (by GIZ Germany), IndoSys2014, Bangalore (by IndoSys Organizers) , Guest Scientist / Guest Lecturer visits (TUM, Germany); IPDPS 2015 Hyderabad; HiPC 2015 Bangalore.
- **Science Slam Second Prize Winner:** Science Slam - Kolkatta Event - 2014 (Organized by GIZ, DWIH, Germany)

EXPERIENCE : **Total Years of Experience: 20 years 1 month**

Sl. No.	Duration	Position	Affiliation	Country
1	25.6.19 to Till Date	Faculty Incharge (R&D and International Affairs) **Permanent Position**	Indian Institute of Information Technology Kottayam, Kerala.	India.
2	11 April 2022 to 31 August 2022	Guest Professor	TUM-Germany	Germany
3	Aug. 2017 to 24.6.2019	Adhoc Faculty	Indian Institute of Information Technology Kottayam, Kerala.	India.
4	6 years 4 months	Professor (Promoted on 1.4.2011 as Professor)	St.Xavier's Catholic College of Engineering, Research Centre, Anna University - Chennai, India	India
5	15 Oct 2016 to 15 April 2017. (as LIEN leave from SXCCE)	Guest Professor	Technical University Munich, Germany	Germany
6	1 month (July 2012) 15 days (Oct 2012) 12 days (March 2015) 10 days (March 2016) (During vacation slots from SXCCE)	Visiting Scientist	Technical University Munich	Germany
7	2 years.	PostDoctoral Scientist	Technical University Munich	Germany
8	4 months	Asst.Professor	St.Xaviers Catholic College of Engineering	India
9	4 years 6 months (May 2004 to Nov 2008)	Asst.Professor (during Ph.D studies)	Kalasalingam University, India (Earlier named as *Arulmigu Kalasalingam College of Engineering AKCE*)	India
10	9 months	R&D Engineer	Power Electronic Industries, Chennai. (Torvin Technologies Pvt.Ltd – Chennai)	India

MEMBERSHIP :

i) Senior Member and Brand Ambassador – IEEE
ii) ACM Member – Invitee
iii) Member – EUIndiaGrid
iv) Member – Indian Society for Technical Education (Life Member).
v) Member – Alumni Technische Universitat Muenchen, Germany
vi) Member – International Society of Engineering Association (Computer Society)

ADMINISTRATIVE TASKS :

i) Director/PI/Representative Officer – AIC IIITKOTTAYAM FOUNDATION (2018 onwards)
ii) Faculty In-charge -- R&D and International Affairs at IIIT Kottayam (2019 onwards)
iii) IEEE based ICGHPC Organizer – 2013, 2016 and IEEE-ICITIIT'20 – 2020
iv) Assistant Warden – Kalasalingam University (2005-2008)
v) Project Coordinator - (M.E – C&N, SXCCE-Anna University, 2011 to 2016)
vi) PG Coordinator (M.E – C&N, SXCCE-Anna University, 2011 to 2016)
vii) Placement Incharge – IIIT Kottayam (2017-2018)
viii) Assistant Warden – IIIT Kottayam (2017-2018)

PROJECTS : Ongoing Projects

Sl.No.	Title of the project	Role	Funding Agency	Year of Start	Amount in Rupees
1	MSME-BI-IIITKOTTAYAM (Incubation Centre)	Principal Investigator	MSME, Govt. of India	April 2021	Rs. 15 lakhs per idea (10 ideas per year) 4 ongoing ideas. (Mentored)
2	Seed Fund Scheme (Incubation Centre)	Principal Investigator	StartupIndia, Govt. of India.	Dec. 2021	Rs. 2 **crores**
3	IoT Cloud Societal Project	Principal Investigator	NITI-AIM, Govt.of India	April 2019	Rs. 3.56 **crores**

PROJECTS : Completed Projects / Grants

Sl.No.	Title of the project	Role	Funding Agency	Year of Completion / period	Amount in Rupees
1	HPC Cloud Research and Applications – *Returning Experts Grant*	Principal Investigator	CIM-GIZ Germany	Mar 2011 (2 years)	Rs. 453600

2	HPC Cloud Research and Applications – *Returning Experts Grant (Extension)*	Principal Investigator	CIM-GIZ Germany	Mar 2012 (1 year)	Rs. 226800
3	Online-based Energy Consumption Analysis Methodology for Scientific Applications	Principal Investigator	DST – SERB	Feb 2015 (3 years)	Rs. 1512000
4	Energy Aware Autotuning for Scientific Applications	Principal Investigator	DST-FWF	April 2017 (3 years)	Rs. 1705680
5	Exploration of Blockchain technology and development of Secure transactions and Smart Contract Solutions	Consultant (Principal Investigator)	BEL, India	Dec. 2018 (1 year)	Rs. 4,16,400/-
6	Energy Aware Scientific Workflow Compiler for Future Heterogeneous Systems	Principal Investigator	OEAD-DST, India	January 2019	Rs. 18,82,740/- (Indian Side: Rs.816250)
7	DST-NIMAT Entrepreneurial Program	Principal Investigator	DST, India	Jan. 2019 (6 months)	Rs. 3,00,000
8	DST-NIMAT Entrepreneurial Program	Principal Investigator	DST-India	Aug. 2019 (6 months)	Rs. 3,00,000
9	Design and Development of Blockchain based Inter-Organization Identity Management System	Principal Investigator	BEL-India	Sep 2020 (15 months)	Rs. 10,00,000/-
10	Edge Computing and Analytics	Co-PI	Indo-UK Going Global Partnerships, Exploratory Grants.	Dec. 2021	20000 UK Pounds
11	DSIR-SIRO	Principal Investigator	DSIR, Govt. of India	2018 to 2021	Purchase-Related.

Participated Projects

i) ISAR project : Post Doctoral Researcher of ISAR project for the Periscope toolkit development (http://www.lrr.in.tum.de/~periscop/) - Germany (2 years)
ii) Grid Scheduling algorithms at TIFAC Core in Network Engineering, DST funded project.
iii) Hot Standby Routing Protocol for Catalyst switches in Software Technologies Group of TIFAC Core in Network Engineering

INVITED TALKS (Outside India):

1. Teaching Internet of Things (at TUM-Germany) - Summer 2022.
2. Guest Lecture on Topic "Edge Intelligence and Protocols for IoT Applications" on 15.7.2022, Univ. of Klagenfurt, Austria.

3. Teaching Cloud Computing (at TUM-Germany) -2016-2017-2018-2019-2010-2011-2012-2013-2014-2015-2016-2017-2018-2019-2020-2022-2023.
4. Guest Lecture on IoT Cloud for Societal Applications (at Univ.of Klagenfurt, Austria) – 2019.
5. Machine Learning and Cloud Solutions for Tools, TUM-Germany, May 2016.
6. Energy Aware Autotuning for Scientific Applications (ActionPlan) 2014.
7. HPC Cloud Applications and Performance Issues 2012.
8. Instrumenting C based HPC applications 2009.

INVITED TALKS (In India):

2023:

1. Keynote Speaker and Chief Guest on ATAL-FDP on AI-Based Edge and Fog Computing , Topic: Serverless IoT for Edge-Enabled Social Good Applications, at SriKrishna College of Engineering, Coimbatore, 30.1.2023.
2. Keynote Speaker and Chief Guest on 5th International Conference on Intelligent Communication Technologies and Virtual Mobile Networks (ICICV 2023) , Topic: Remote Healthcare Monitoring using Serverless IoT, 16.2.2023.
3. Keynote Speaker and Chief Guest on 3rd International Conference on Smart Data Intelligence (ICSMDI-2023), Topic: IoT Communication Protocols and Social Good Applications, on 30.3.2023.

2022:

4. Keynote Speaker on AICTE-FDP on "5G/6G -- A Next Generation IoT Perspective" at VelTech Institute of Technology, Online, 22.11.2022 (7 PM to 9:30 PM).
5. Keynote Speaker on 3rd International Conference on Data Intelligence and Cognitive Informatics on the topic "Federated Learning using Edge Nodes" on 6.7.2022.
6. Keynote Speaker on International Conference on IoT Based Control Networks and Intelligent Systems ICICNIS 2022 , Reva University, India, on the topic "Edge Intelligence" on 1.7.2022.
7. Webinar Speaker on "Edge Intelligence for IoT Applications", invited by IEEE/ACM India Council , on 11.6.2022. Watch here!
8. Keynote Speaker on 2nd Int. Conf. on Soft Computing for Security Applications, ICSCS 2022, Date: 21.4.2022. Watch here!
9. Keynote Speaker on 2nd Int. Conf. on Smart Data Intelligence ICSMDI2022., Topic: IoT Edge/Cloud for Smart Cities -- A Manhole Depth Analysis Perspective 11.4.2022. Watch here!
10. Keynote Talk on Springer ICMCSI 2022: 3rd International Conference on Mobile Computing and Sustainable Informatics (ICMCSI 2022), Title: IoT and Edge Intelligence, 27.01.2022. Watch here!
11. Keynote Talk on ICSCDS 2022: International Conference on Sustainable Computing and Data Communication Systems, 7.4.2022
12. Keynote Talk on 2nd International Conference on Smart Data Intelligence (ICSMDI 2022), 11.4.2022
13. Keynote Talk on IEEE ICICV 2022: 4th International Conference on Intelligent Communication Technologies and Virtual Mobile Networks, 10-11, February 2022.
14. Keynote Talk on (ICISC-2022), 6th Int. Conf. on Inventive Systems and Control, Title: "IoT for Air Quality Monitoring -- Edge, Cloud, Serverless, and Quantum Computing", 6th Jan. 2022.

2021:

1. Keynote Talk on AICTE-FDP organized by University College of Engineering, Kancheepurun, Anna University, Title: "IoT - Can it benefit from Quantum Computing?" 30.12.2021, India.

2. Cheif Guest, 4th International Conference (ICCBI-2021), Springer, CARE Technology Institute, Trichy, 9.12.2021, India.
3. Keynote Talk on National Webinar organized by the University of Madras, Chennai, in Oct. 2021, Topic: "IoT for Healthcare Applications".
4. Keynote Talk on AICTE FDP organized by J.C. Bose University, Haryana, on 16.9.2021 at 9:30 AM to 11:30 AM
5. Keynote Talk on IEEE-Madras section sponsored FDP by National Engg. College, Kovilpatti (Autonomous Institution), Topic: "Remote Medical assistance through IoT" on 06/08/2021, at 3.15pm to 4.15pm.
6. Resource Person: AIC-IIITKottayam organized workshop on topic "IoT Research and Effective Article Writing on 28.7.2021 from 9:30 AM to 1:00 PM
7. Keynote Talk on AICTE FDP organized by Charusat University, Gujarat, India on "IoT for Air Quality Monitoring in Smart Cities" on 16.6.2021 FN
8. Keynote Talk on STTP organized by PSNA College of Engineering, sponsored by Centre For Faculty Development, Anna University, Chennai - 25, on 31.5.2021, Topic: Serverless IoT For Sensor Applications
9. Keynote Talk on International Conference on Smart Data Intelligence (ICSMDI 2021); Topic: "Serverless Cloud Architecture for DeepIoT Analytics", 29.4.2021
10. Keynote Talk on STTP organized by GEC Barton Hill -- Topic: "Serverless Cloud Deployment for IoT Applications", sponsored event by DTE, Govt.of Kerala, 23.2.2021
11. Keynote Talk -- Topic: "Recent Trends in IoT and Funding Options", Workshop by State Project Felicitation Unit, Kerala; Dr. Usha Titus, I A S, Principal Secretary, Higher Education Department, Government of Kerala, will inaugurate the session, 28.1.2021 (AN).
12. Keynote Talk -- Topic: "IoT-Cloud related Funding Schemes for Entrepreneurs", at COHORT-Impulse 2021, 20.1.2021.
13. AICTE-FDP -- Keynote Talk on Topic: "IoT for Wearable Applications", at SaintGits Engg. College, Kottayam, 13. Jan. 2021.
14. AICTE-FDP -- Keynote Talk on Topic: "IoT - Performance and Monitoring Aspects", Knowledge Institute of Technology, Salem, Tamilnadu, 4.Feb. 2021.

2020 - Completed:

1. IEEE ICOSEC2020 -- Keynote Talk on "Serverless Blockchain - Pros and Cons" -- Sep 2020.
2. AICTE-FDP -- Keynote Talk on "Monitoring of Machine using IoT" at Amity University -- Oct 2020.
3. IoT Cloud for Trainers of School Students, Webinar Series at Labor India Teachers College of Mahatma Gandhi College, Kottayam, Kerala, India -- Aug 2020.

ENTREPRENEURIAL/OUTREACH ACTIVITIES:

2023:

1. *Distinguished Global Speaker:* 2nd Global Entrepreneurship Catalyst Symposium 2023, Cape Town, South Africa, Title: Mentoring Tech-Startups , Date: 28.10.2023.
2. *Organizer:* Startnow - Entrepreneurship Awareness Program, Date: 19.10.2023.
3. *Organizer:* Management Development Program on Scaling up of MSMEs through Information and Communication Technology, Date: 6.3.2023 to 10.3.2023.
4. *Organizer:* Co-Innovation Strategies on National Startup Day, Date: 16.1.2023, Chief Guest: Mr. Surya Bose (Niece of our leader Shri. Subash Chandra Bose)

2022:

5. *Organizer:* Intellectual Property Rights (IPR) awareness program of National IP Awareness Mission, Govt. of India, on 14.6.2022.
6. *Speaker* at National Education Policy on topic "Importance of Incubation Centres for HEIs" at Indian Institute of Information Technology Kottayam, Nagpur on 28.3.2022.
7. *Speaker* at Nexpression Pvt. Ltd 100 Day Learning Series, 15.3.2022, Topic: AIC-IIITKottayam for HEIs.
8. *Organizer* along with AIC team: "Need for Women Entrepreneurs in India", 8.3.2022 - Speakers: Mr. T. Prassanna, CTS Senior Manager, Ms. Charmine, South Africa, Ms. Amritha, Litmus7.
9. Logo Launch: Nelicca of Nexpression Pvt. Ltd, on 10.1.2022.

2021:

1. Speaker and Member: Institute Innovation Council, on 9.10.2021.
2. Organizer -- Serve Nation as an Entrepreneur -- iDEX Outreach program of the Ministry of Defense (23.9.2022), , Chief Guest: i) Gp. Cap. Shri. Pallav Haldekar (IAF), ii) Shri. Dayanand DIO, iii) Shri. Ganesh Kumar (Director-Sales, Tata Elxi), iv) Shri. Kewyn Walter (Author of Digital First), v) Shri. Manoj Nimbalkar (Founder of DareToStart, Germany.
3. Speaker and Member: Strategies for Innovation and Entrepreneurship in Rajiv Gandhi Institute of Technology Kottayam, Institute Innovation Council, on 31.7.2021.
4. Organizer -- 3D Printing -- Redefining Innovation on 18.2.2021
5. Organizer -- ACM/CSI/IEEECS sponsored Symposium on "IoT Cloud for Societal Applications (IoTCloud'21)" on 3 May 2021.

2020 & Others:

1. Organized Indo-European Entrepreneurial Hacks2020 , Nov2020
2. Serving as Director/PI/Representative Officer of AIC-IIITKottayam Foundation
3. Serving as MSME-Business Incubation Incharge of IIIT-Kottayam
4. Policy Ambassador/ NISP Coordinator (IIIT-Kottayam) of AICTE Startup Policy
5. Organized Technological Entrepreneurial Development Program (DST-EDII) - 2019, 2020
6. Jury-Judge of Wadhwani Foundation
7. Mentor of several startup companies
8. Training Organized: IT technologies for business Training program, Total Attendees: 19; 1.10.2019
9. Training Organized: IoT Training Program for Entrepreneurs, Total Attendees: 16 | 5.2.2020
10. Training Organized: Proposal Writing; Total Attendees: 40 | 5.12.2019
11. Outreach activity -- Kiddovate Event; Total School Students: 33 | 15.8.2019
12. Outreach activity -- Kiddovate Event; Total School Students: 85 | 3.3.2020

EDITORIAL/REVIEWER/ORGANIZER :

- Associate Editor – IEEE ACCESS Journal (IEEE)
- Special Issue Editor – Internet of Things Journal (Elseiver) – in Aug. 2022
    - ***Editors:*** *Shajulin Benedict, Michael Gerndt, and Radu Prodan*
    - ***Title:*** *Scalable and Secure IoT using Cloud/Fog/Edge Computing*
    - ***Journal Name:*** *Internet of Things* ***ISSN:*** *2542-6605*

- Special Issue Editor – Scalable Computing: Practice and Experience – in Sep. 2019
    - ***Editors:*** *Shajulin Benedict and Michael Gerndt*
    - ***Title:*** *IoT Cloud Solutions for Societal Applications*
    - ***Journal Name:*** *SCPE* ***ISSN:*** *1895-1767*
- Special Issue Editor – Computing Journal (Springer) – in Aug. 2017
    - ***Editors****: Shajulin Benedict, Michael Gerndt, and Seigfried Benkner,*
    - ***Title****: Energy Reduction Techniques for Exa-Scale Computing – Theory and Practice*
    - ***Journal Name****: Computing (Springer)* ***ISSN****: 0010-485X (print version)*

ACADEMIC CO-CURRICULAR ACTIVITIES :

- Organizer :, 25th ACM Intl. Conf. on Distributed Computing and Networking, ICDCN 2024 Workshop on Ideas, Algorithms, Models, Libraries and Tools for Leveraging Heterogeneity in Computing Paradigms, at IIT-Madras, Date: 4.1.2024.
- Organizer :, Talk on Career/Research Improvement Techniques by Mr. Nandalal-EBSCO-IEEE, Date: 3.10.2023.
- Organizer :, Workshop on IoT Platforms and Programming Essentials, jointly with TUM-Germany, and AIC-IIITKottayam, Date: 7-12 Aug. 2023.
- Organizer :, Research Techniques and Career Development using IEEEXplore , Date: 24.11.2022.
- Organizer :, In-plant Training on IoT, 23 participants, Rs. 1000 per candidate, Date: 19,20-12.2022.
- Organizer :, EBSCO-IEEE (Industry-Specific) webinar on "Value of IEEE Xplore in Research & Career Development" by Mr. Nandalal M. on 24.11.2022, 5 PM.
- Organizer :, 3 Day Workshop on IoT Analytics by Mr. Behera, TCS-Hyderabad, on 8,10,12 Nov. 2022, 8:30 PM to 9:40 PM.
- Organizer :, EBSCO-IEEE (Industry-specific) webinar on "IEEE Article Writing and Digital Library Features" by Mr. Nandalal M. -- 2.3.2022.
- Organizer :, AICTE-Sponsored FDP program on "Serverless IoT for Societal Products" - 24.5.2021 to 28.5.2021
- Keynote Speaker - IEEE/ACM/Springer Conferences.
- Board Of Studies Member - Dept. of CSE, National Engg. College (autonomous Institute of Anna Univeristy - Chennai) - 7.12.2020, 23.6.2021, 25.11.2021.
- Organizer :, AICTE-Sponsored FDP program on Internet of Things on 14.9.2020 to 18.9.2020
- Organizer : IEEE-based ICITIIT-20 at IIIT-Kottayam and published in IEEE Digital Library.
- Organizer : IEEE-based ICGHPC13, ICGHPC16.
- mTaaS, CCGrid2017, cloudCom2015, cloudCom2016, ACM-SIGARCH ICS2014, Europar2013, PARCO2011, IC32015, IC32016, IC32017

Reviewer/TPC:

- Reviewer - IEEE Trans.on Parallel and Distributed Systems (2010, 2011, 2022,2023)
- Reviewer - Elsevier - Computers and Industrial Engineering, since 2020
- Reviewer - Elsevier - Journal of Parallel and Distributed Computing, since 2017
- Reviewer - Elsevier - Alexandria Engineering Journal, since 2016
- Reviewer - Elsevier - Sustainable Computing: Informatics and Systems, since 2017
- Reviewer - IEEE Trans.on Systems, Man, Cybernatics, Part-II (2009)
- Reviewer - Springer - Computing Journal - 2016, 2020
- Special Issue Editor - SCPE Journal (Scalable Computing Practice and Experience)
- Technical Program Committee of

- IEEE ICC'22 - SAC-02 CCNS Track
- 6th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud), I-SMAC 2022, Tribhuvan University, Nepal.
- Springer ISIC 2022, 2021
- IEEE ICOISC 2022
- IEEE-based ICICCS 2022
- IEEE IC32021
- IEEE ICECA 2021
- 4th CoCoNet Conference, India. ,
- 12th IEEE-CloudCom2020,
- IEEE ICC'20 CFCNS Track,
- EuroPar2020
- IEEE-CloudCom2019-Australia ,
- IEEE-PREMI2019,
- IEEE ICC'20 CFCNS Track,
- Advisory Committee of AICTE-Sponsored ICDIIS-20 Springer Conference

Ph.D Thesis Examiner: -- Indian Examinar (and, Viva-Voce Board):

- Kalasalingam University, Srivilliputhur, India, 2020.
- Sathyabama University, Chennai, India, 2019, 2022 (2).
- Visvesvaraya Technological University, India, 2021, 2022.
- Anna University-Chennai, India, 2019, 2020, 2021, 2022, 2023.
- National Engineering College, Anna University, 2022, 2023.
- Rajiv Gandhi Institute of Technology, Govt. Engg. College, Kerala, 2020.

SUBJECTS TAUGHT:

Course Title	**Level (UG/PG)**	**Number of Times**	**Taught for**
Fundamentals of Fog and Edge Computing	*PG*	*1*	*IIIT-Kottayam*
Internet of Things	*UG* *PG*	*3* *1*	*IIIT-Kottayam* *TUM-Germany*
Cloud Computing (Collaboration with TUM-Germany)	*UG*	*7*	*IIIT-Kottayam*
Operating Systems	*UG*	*2*	*IIIT-Kottayam*
Computer Organization	UG	1	IIIT-Kottayam
Blockchain Technology	UG	2	IIIT-Kottayam
Parallel and Distributed Computing	UG	2	IIIT-Kottayam
Electric Circuits and Digital Design	UG	2	IIIT-Kottayam
Advanced Computer Networks	UG	1	IIIT-Kottayam
Cloud Computing and Cloud Computing lab	PG	1 (2016 completed) Guest Lectures: 1 (Oct 2017)	Technical University Munich, Germany

		1 (Oct 2018) 1 (Oct 2019) 1 (Oct 2020)	
Nanotechnology and Applications	PG	1	SXCCE, Anna Univ. Chennai
Cloud Computing	*PG*	*3*	*SXCCE, Anna Univ. Chennai*
Grid Computing	PG	2	SXCCE, Anna Univ. Chennai
Advanced Operating Systems	PG	2	SXCCE, Anna Univ. Chennai
Network Management	PG	2	SXCCE, Anna Univ. Chennai
Real Time Embedded Systems	PG	1	SXCCE, Anna Univ. Chennai
Advanced Computer Architecture	PG	3	AKCE, Anna Univ. Chennai
Computer Networks	UG	3	AKCE, Anna Univ. Chennai
Electromagnetic Field Theory	UG	2	AKCE, Anna Univ. Chennai
Advanced Computer Networks	UG	2	AKCE, Anna Univ. Chennai
Network Routing Algorithms	PG	1	AKCE, Anna Univ. Chennai
Spread Spectrum Communications	PG	2	AKCE, Anna Univ. Chennai

SELECTED PUBLICATIONS :

Patents:

1. Indian Patent (Design - Granted) - Title: Smart Height Adjustable Table, No:348573-001, Journal No:51/2022, date: 23.12.2022.
2. Australian Patent (Granted) - Title: Scalable space structured ledger framework for Industrial Internet of Things using Blockchain technique, Patent No: 2021106931, dated 17.11.2021.
3. Indian Patent (Design - Granted) - Title: Automatic Fish Feeder, No: 334476-001 - Journal No: 52/2020 dated 25.12.2020.
4. Indian Patent (Granted) - Title: Digital Cost Meter for Fused Deposition Modeling (FDM) 3D Printers, No: 202041055550, Journal No: 52/2020 dated 25.12.2020.
5. Indian Patent (Design - Granted) - Title: Smart Bin with Rewarding Tracker, No: 333752-001 - Journal No: 46/2020 dated 13.11.2020.

Books:

1. Shajulin Benedict, Big City Bold Ideas , Self-pub, Edition 1, ISBN: 978-93-5408-352-5, pp. 1-94, Jan 2021.

2. Shajulin Benedict, Deep Learning Techniques for Social Impact, in IOPPublishers, UK (London), pp. 1 - 264, October 2022.

3. Shajulin Benedict, Edge Intelligence, UK Publishers (ONGOING), Estimated time: April 2024.

SCI Journals:

1. Shajulin Benedict, EA-POT: An Explainable AI Assisted Blockchain Framework for HoneyPot IP Predictions, accepted in Acta-Cybernetica Journal, 2022.
2. Basil Sunny, Shajulin Benedict, and Rajan M.P., Electrical energy estimation of 3D printing jobs for industrial internet of things(IIoT) applications, in Rapid Protyping Journal, Emerald Publishers, doi: https://doi.org/10.1108/RPJ-05-2022-0157, 2023.
3. Zahra Najafabadi Samani, Narges Mehran, Dragi Kimovski, Shajulin Benedict, Nishant Saurabh, Radu Prodan, Incremental Multilayer Resource Partitioning for Application Placement in Dynamic Fog, in IEEE Trans. on Parallel and Distributed Computing, doi:10.1109/TPDS.2023.3262695, , Vol. 34, No. 6, pp. 1877--1896, June 2023.
4. Shajulin Benedict, IoT-Enabled Remote Monitoring Techniques for Healthcare Applications -- An Overview, in Informatica Journal, Vol. 46, pp. 131--149, DOI: https://doi.org/10.31449/inf.v46i2.3912 , 2022.
5. Shajulin Benedict, Shared Mobility Intelligence using Permissioned Blockchains for Smart Cities, in New Generation and Computing, Vol. 40, pp. 1009--1027, DOI: 10.1007/s00354-021-00147-x , Springer, 2022.
6. Markus Steinbach, Anshul Jindal, Mohak Chadha, Michael Gerndt, and Shajulin Benedict, TppFaaS: Modeling Serverless Functions Invocations via Temporal Point Processes, in IEEE ACCESS journal, Vol. 10, pp. 9059-9084, DOI: 10.1109/ACCESS.2022.3144078 , 2022.
7. Shajulin Benedict, Serverless Blockchain Enabled Architecture for IoT Societal Applications, in IEEE Transactions on Computational Social Systems, Vol. 7, No. 5, pp. 1146-1158, doi:10.1109/TCSS.2020.3008995 , 2020.
8. Nishant Saurabh, Shajulin Benedict, Jorge G.Barbosa, Radu Prodan, Expelliarmus: Semantic-Centric Virtual Machine Image Management in IaaS Clouds, in Journal of Parallel and Distributed Computing (Elsevier), Vol. 146, DOI: https://doi.org/10.1016/j.jpdc.2020.08.001 pp. 107-121, 2020.
9. Ennio Torre, Juan J. Durillo, Vincenzo de Maio, Prateek Agrawal, Shajulin Benedict, Nishant Saurabh, Radu Prodan, A Dynamic Evolutionary Multi-Objective Virtual Machine Placement Heuristic for Cloud Data Centers, in Information and Software Technology, Vol. 128, No. 106390, pp. 1-12, DOI: https://doi.org/10.1016/j.infsof.2020.106390 Elsevier, Dec. 2020.
10. Shajulin Benedict, Rejitha R.S., Preethi B., Bright C., and Judyfer W.S., Energy Analysis of Code Regions of HPC Applications using EnergyAnalyzer Tool, in Int. Journal of Computational Science and Engineering, InderScience publishers, Vol. 14, No.3, pp.267-278, DOI: 10.1504/IJCSE.2017.084163 2017.
11. Shajulin Benedict (2018), Prediction Assisted Runtime Based Energy Tuning Mechanism for HPC Applications, in Sustainable Computing, Informatics and Systems, Elsevier, Vol.19, pp.43-51, https://doi.org/10.1016/j.suscom.2018.06.004, 2018.
12. Shajulin Benedict, SCALE-EA: A Scalability Aware Performance Tuning Framework for OpenMP Applications, Scalable Computing: Practice and Experience, Vol. 19, No.1, pp. 15-

29, DOI 10.12694/scpe.v19i1.1390, (https://www.scpe.org/ index.php/scpe/article/ view/1390/525) 2018.
13. A Stephen, Shajulin Benedict, RPA Kumar, Monitoring IaaS using various cloud monitors, in Cluster Computing, Vol. 22, No. 5, pp. pp 12459–12471, https://doi.org/10.1007/s10586-017-1657-y, Springer, 2019.
14. Rejitha R.S., Shajulin Benedict, Suja A.Alex, and Shany Infanto (2017), 'Energy Prediction of CUDA Application Instances using Dynamic Regression Models', in Computing-Springer, DOI:10.1007/s00607-016-0534-5 , pp.1-26, 2017.
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