RESUME

Dr. S. SHITHARTH, M.E., MBA., Ph.D.,

CYBER SECURITY / BLOCKCHAIN EXPERTISE

PROFILE

Name
Shitharth Selvarajan

Date of Birth
August 20, 1990

Address
16, Azees Nagar,
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Tamilnadu-626101.

Nationality
Indian

Languages Speak
Tamil, English, Telugu

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Citation - 1100

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SCHOLARATIC REVIEW

YEAR	DEGREE / UNIVERSITY-INSTITUTION	PERCENTAGE
2018	**Doctor of Philosophy** (PhD) (Information & Communication Engineering - Industry Collab -RL Global) Anna University, Chennai.	Awarded
2014	**Master of Engineering (M.E)** **(Computer Science Engineering)** Anna University- Thiagarajar College of Engineering	80 %
2016	**Master of Business Administration (MBA)** **(Education Management - DE)** Alagappa University	70%
2012	**Bachelor of Technology** (B.Tech) **(Information Technology)** Anna University- KGISL Institute of Technology	70 %
2008	**Class XII** (HSC) SBKHigher Secondary School	86.8 %
2006	**Class X** (SSLC) SBK Higher Secondary School	88 %

AREAS OF INTEREST

- **Cyber Security**
- **Ethical Hacking**
- **Cloud Computing**
- **Blockchain Tech**

PERSONAL TRAITS

- **Amiable and Compassionate**
- **Willingness to learn, team facilitator and hard worker.**
- **Motivational Speaker**
- **Dedicated and Tenacious**

ROLES & RESPONSIBILITIES:

- Handling academic Classes, Handling Lab Sessions
- Project Coordinator, Class Coordinator
- Student Councillor
- Technical Seminar Coordinator, Comprehensive Viva Coordinator
- Course lead - Cyber Security
- Curriculum Developer - Blockchain Technology
- Project Guide for B.S, M.S, PhD students

Ph.D THESIS TITLE:

'AN OPTIMIZATION FRAMEWORK FOR INTRUSION DETECTION IN SCADA SYSTEM'

PUBLICATIONS & ACADEMIC ACTIVITIES:

				Annexure enclosed	
Patent Published	Books Edited	International Journal Published	International Conferences	National Conferences	Workshops Attended
4	2	85	20	2	9

- FDP / Sessions Conducted - 15
- Coursera/NPTEL Certifications - 10

- ## Professional Activities

- Appointed as Technical Program Committee Chair for ICAIDS - 2022
- Acted as an organising committee member in a One week online FDP on 'OBE EDUCATION' under AICTE MARGADARSHAN SCHEME in Vardhaman College of Engineering from 23 August 2021 to 28 August 2021.
- Delivered a plenary lecture titled "Machine Learning in Cyber security" in AICTE Sponsored Two Week Online FDP on "APPLICATIONS OF MACHINE LEARNING & DEEP LEARNING IN ELECTRICAL ENGINEERING" SERIES-I organized by Department of Electrical and Electronics Engineering, Kamaraj College of Engineering and Technology, during 18th– 30th January, 2021.
- Delivered a plenary lecture titled "Cloud Computing – The Paradigm Shift" organized by Department Computer Science and Engineering, Middle East College, Oman, June 5, 2021.
- Delivered two sessions on "Impact and applications of Decentralized network" on 5.03.2021 in the Winter School: Mathematics, Computer Science & Information Technology organized by the UGC-Human Resource Development Centre, Kannur University, Kerala.
- Presented a session in one week Faculty Development Programme on "CYBER OPERATIONS" organized byCentre for Cyber Security -Department of Computer Science & Engineering from 28-01-2019 to02-02-2019 in Vardhaman College of Engineering.
- Acted as resource perosn for Three day online Faculty Development Program on Blockchain Technology, organized by Department of CSE, Kallam Haranadhareddy Institute of Technology in colloboration with Computer Society of India (CSI) from 26th May to 28th May, 2020

EXPERIENCE:

Name of the Institution- University	Position/Designation	Period	Experience
Leeds Beckett University	Lecturer	September 2023	Present
University of Essex	Postdoc Researcher	March 2022	May 2023
Kebri Dehar University	Associate Professor	Nov 2021 - Till date	----------------
Vardhaman College of Engineering	Assistant Professor	Jan 2019 - Oct 2021	2 years & 10 months
Aurora's Scientific Technological & Research Academy	Assistant Professor	Feb 2017- Nov 2018	1 years & 10 months
Kamaraj College of Engineering & Technology - Anna University	Research Fellow	Jan 2015- Feb 2017	2 year & 3 months
RL Global Solutions	R & D - Assist	Jan 2015 - Feb 2017	2 years & 3 months

ACHIEVEMENTS

- ## As a Motivational Speaker

  - Presented lot of lectures on "Motivational Thought Process" in many schools and colleges.
  - Conducted self-motivation programmes among staff members and students.
  - Been as a Student Councillor for two years.

- ## Other Achievements

  - Acted as a Review Panel member for Toycathon - MHRD Innovation Cell, Indian Govt.
  - Certified from Google Cloud for completing google qwiklabs cloud training.
  - Appointed as an Audit Committee member for Internal College Auditing in
  - Vardhaman College of Engineering.
  - Delivered a lecture as a guest speaker on "Attacks on OSI layer" held on 28-Jan-2018 at Centre for Cyber Security, Vardhaman College of Engineering.
  - Cleared NPTEL exam on "Cloud Computing" (NPTEL ID - NPTEL18CS16S2390604).
  - Got C1/4+ grade (Advanced Skill), in English Writing Test conducted by University Of Cambridge.
  - Got C2/5+ grade (Very Advanced Skill), in English Writing Test conducted by University Of Cambridge.
  - Award of Achievement in successfully completing the Oracle Database 10G: Program with PL/SQL in KG Information System Private Limited, Coimbatore.
  - Award of Achievement in successfully completing the Oracle Database 9i: Introduction to SQL in KG Information System Private Limited, Coimbatore.
  - Acted as an Event Organizer Head in "ARISTA – 2K12" Technical Symposium conducted by KGISL Institute of Technology, Coimbatore.

CYBER SECURITY / BLOCKCHAIN CERTIFICATIONS:

- CeH V10 – Certified Ethical Hacker
- Certified Blockchain Expert
- Certified Hyper ledger Expert
- Certified Cloud Security (Pursuing)
- Certified Forensic Investigator (P)
- Certified Network Defender (P)
- CISM – Certified Information Security Manager (Training Course)
- CISSP - Certified Information System Security Professional (Training Course)
- CISA - Certified Information Systems Auditor (Training Course)
- CSP – Certified Cloud Security Professional (Training Course)
- CompTIA Security+ 501 (Training)

CLOUD DOMAIN CERTIFICATIONS:

- AWS Cloud Architect
- Google Cloud Certified

PROFESSIONAL SERVICES:

S.No	Name of Journal	Publisher	Reviewer	Guest Editor
1	IEEE Internet of Things	IEEE	✓	✗
2	IEEE ACCESS	IEEE	✓	✗
3	Current Bioinformatics	Bentham Science	✓	✓
4	Scientific Reports	Nature	✓	✗
5	All CSE Journals	Hindawi Publications	✓	✗
6	Elsevier Reviewer Hub	Elsevier	✓	✗
7	Contemporary Mathemetics	Wiser Pub	✓	✓
8	All CSE Journals	MDPI	✓	✗
9	All Springer Open CSE journals	Springer	✓	✗
10	Journal of Electrical Engineering	Politechnica Publishers	✓	✗
11	WIley CSE Journals	Wiley	✓	✗
12	Journal of Remote Sensing , EiS	Taylor & francis	✓	✗

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PROFESSIONAL BODY MEMBERSHIPS:

- Senior Member IEEE – (Membership ID- 95549205)
- Member of IEEE Computer Society
- ACM Professional Member (ID - 0007847)
- Life Member- International Association of Engineers (IAENG) - 190265
  (Member in IAENG Society of Computer Science & IAENG Society of Wireless Networks)
- Life Member- Indian Environment Network
- Associate Member- Institute of Research Engineers & Doctors - AM101000582307

ACADEMIC PROFESSIONAL REFERENCES:

- *Prof.Haris Mouratidids*

  Director, Institute of Analytics and
  Data Science,
  Professor, School of Computer Science
  and Electronic Engineering,
  University of Essex, Colchester, UK.
  Email: h.mouratidis@essex.ac.uk

- *Dr. Alaa O. Khadidos*

  Director - Artificial Intelligent and Data
  Analysis Centre
  King Abdulaziz University,
  Jeddah, SA
  Email: aokhadidos@kau.edu.sa

- *Dr. Praveen Kumar Donta*

  Distributed Systems Group
  TU Wien, Vienna, Austria
  Email: donta@dsg.tuwien.ac.at

- *Dr.D.Prince Winston*

  Associate Professor/EEE,
  Kamaraj College of Engg. & Tech.,
  Virudhunagar- 626001,
  Tamilnadu, India.
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DECLERATION:

I hereby solemnly affirm that all the details given above are true to the best of my knowledge and belief.

Your Sincerely,
[S. SHITHARTH]

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ANNEXURE:

- ## PATENT PUBLISHED - 4

Title of the Invention	Application No. & International Classification	Status
A novel method to detect adversaries using MSOM algorithms longitudinal conjecture model in SCADA network.	202141006788A	Published (26/02/2021)
IWP-CSO Technique for Feature Optimization Framework and a Hybrid HNA-NN Technique for Classification Framework for IDS in SCADA Network	201841019067 A G06N 3/00	Published (01/06/2018)
ACCESS POINT SELECTION FOR FAIR LOAD BALANCING IN WIRELESS LOCAL AREA NETWORKS	201841030044 A H04W48/20; H04W28/08	Published (17/08/2018)
OPTICAL 3D PUZZLE TOY MICROSCOPE APPARATUS	201841033209 A G02B21/00	Published (14/09/2018)

- ## BOOKS EDITED - 2 (De Gruyter and CRC Press)

- ## FUNDED PROJECTS

  - **Ministry of Education, King Abdulaziz University, KSA, Grant No: IFPIP:1361-611-1443 ($10,000).**
  - **Technology Transfer Scheme, Kebri Dehar University, Sponsored by Govt of Ethiopia ($10,000).**

- ## BOOKS/BOOK CHAPTER PUBLISHED - 8 (Scan QR - Google Scholar)

Title of the Book/Book Chapter	Publisher & Status
A Way to Cyberthon	SHANLAX Publisher, Published ISBN: 978-93-89146-20-2
Integrated Probability relevancy classification (IPRC) for IDS in SCADA	Lecture notes in network and systems, SPRINGER, Published vol. 82, Issue 1, 2019, pp. 41-64
Data Security in Cloud Computing Using Abe-Based Access Control	vol. 196 Issue 1, 2021, pp. 47-62
An Authentication Model with High Security for Cloud Database	vol. 196 Issue 1, 2021, pp. 13-26
IDS Detection Based on Optimization Based on WI-CS and GNN Algorithm in SCADA Network	vol. 196 Issue 1, 2021, pp. 247-266
Predicting Epidemic Outbreaks using IoT, Artificial Intelligence and Clous	Internet of Things, SPRINGER, vol. 01, Issue 1, 2021, pp. 197-222

- **INTERNATIONAL CONFERENCES - 20 (Scan QR - Google Scholar)**

  - G. Srivastava, H. Manoharan, T. R. Gadekallu, R. H. Jhaveri, **S. Selvarajan** and R. Kadiyala, "Connotation of Unconventional Drones for Agricultural Applications with Node Arrangements Using Neural Networks," 2022 IEEE 96th Vehicular Technology Conference (VTC2022-Fall), London, United Kingdom, 2022, pp. 1-6, doi: 10.1109/VTC2022-Fall57202.2022.10013040.

  - P. S. Kumar, U. S. B, I. Mishra, **S. Selvarajan**, D. R. Tripathi and S. Rama Krishna T., "Malware Detection Classification using Recurrent Neural Network," 2022 2nd International Conference on Technological Advancements in Computational Sciences (ICTACS), Tashkent, Uzbekistan, 2022, pp. 876-880, doi: 10.1109/ICTACS56270.2022.9988624.

  - **S.Shitharth**, "Decentralised Voting Application in Ethereum", in International Conference on "International Conference on Intelligent Computing and Networking(IC-ICN-2021)", 0n 26st ; 27 February 2021 Thakur College of Engineering & Technology, Hyderabad.

  - B.Thirumaleshwari Devi, **S.Shitharth**, "Multiple Face Detection Using Haar AdaBoosting, LBP-AdaBoosting and Neural Networks", in 2nd International Conference on Machine Learning, Security and Cloud Computing (ICMLSC 2020) 18th-19th December 2020, Hyderabad, India.

  - **S.Shitharth,** "Security Appraisal on Real Time Scada Data Using Cyber Analytic Tools", in International Conference on Emerging Trends in Engineering and Technology (ICETET-2020)", on 28th - 29th May 2020 at Nashik, Maharashtra.

  - S.Shitharth, "An Appraisal over Intrusion Detection Systems in Cloud Computing Security Attacks", of International Conference on Innovative Mechanisms for Industry Applications (ICIMIA 2020) DVD Part Number: CFP20K58-DVD; ISBN: 978-1-7281-4166-4

  - **S.Shitharth**, "A Novel Hybrid Bayesian Fuzzy Intrusion Detection System for Network Security", in Second International Conference on "Recent Innovations in Engineering and Technology (ICRIEAT-2017)", 0n 21st & 22nd December 2017 at Marriott Hotel, Hyderabad.

  - **S.Shitharth**, "Survey on PDM (Promiscuous Mode detection) in MANET to detect Selective Black Hole Attack", in International Conference on "Devices, Information, Signal processing and Communication" (DISC'14) at Coimbatore Institute of Engineering and Technology.

  - **S.Shitharth,** "Removal of Selective Black Hole Attack in MANET by OLSR protocol", in Fourth International Conference on "Recent Trends in Information Technology" MIT, Chennai.

  - **S.Shitharth**, "Removal of Selective Black Hole Attack in MANET by AODV protocol", in IEEE International Conference on Innovations in Engineering and Technology (ICIET'14) at K.L.N. College of Engineering.

  - **S.Shitharth**, "An Appraisal on Security Challenges and Countermeasures in Smart Grid", in International Conference on Innovations Information Embedded and Communication systems (ICIIECS'15) at Karpagam college of Engineering.

  - **S.Shitharth**, "A Comparative Analysis Two Counter Measure Techniques to Detect DDoS with Sniffers in Smart Grid", in International conference on Smart Grid Technologies (ICSGT 2015) at Amrita University, Coimbatore.

  - **S.Shitharth**, " A Novel IDS Technique to Detect DDoS and Sniffers in Smart Grid", in World Conference On Futuristic Trends In Research And Innovation For Social Welfare (WCFTR'16) at Karpagam college of Engineering, Coimbatore.

- **INTERNATIONAL JOURNALS PUBLISHED - 85 (Scan QR - Google Scholar)**

- **Shitharth Selvarajan** and H. Mouratidis, "A quantum trust and consultative transaction-based blockchain cybersecurity model for healthcare systems," Scientific Reports, vol. 13, no. 1, p. 7107, 2023, doi: 10.1038/s41598-023-34354-x.
- **Shitharth Selvarajan**, Gautam Srivastava, Alaa O. Khadidos, Adil O. Khadidos, Mohamed Baza, Ali Alsheri, Jerry Chun-Wei Lin., " An artificial intelligence lightweight blockchain security model for security and privacy in IIoT systems". J Cloud Comp,(2023), pp.12-38.
- **S. Shitharth,** K. M. Prasad, K. Sangeetha, P. R. Kshirsagar, T. S. Babu and H. H. Alhelou, "An Enriched RPCO-BCNN Mechanisms for Attack Detection and Classification in SCADA Systems," in IEEE Access, vol. 9, pp. 156297-156312, 2021, doi: 10.1109/ACCESS.2021.3129053.
- M.Padmaja, **S.Shitharth,** K.Prasuna, Abhay Chaturvedi, Pravin R.Kshirsagar, A.Vani, 'Growth of Artificail Intelligence to Challenge Security in IoT Application', Wireless Personal Communications, Springer, 2021, DOI: https://doi.org/10.1007/s11277-021-08725-4.
- **S.Shitharth,** Pratiksha Meshram, Pravin R.Kshirsagar, Hariprasath Manoharan, Vineet Tirth and Venkatesa Prabhu Sundramurthy,' Impact of Big Data Analysis on Nanosensors for Applied Sciences using Neural Networks', Journal of Nanomaterials, Hindawi, 2021, https://doi.org/10.1155/2021/4927607.
- **S.Shitharth,** K.Sangeetha ' Enhanced SCADA IDS Security by using MSOM Hybrid Unsupervised Algorithm', International Journal of Web-Based Learning and Teaching Technologies (IJWLTT), Vol.17, Issue 3, 2021, pp.
- Gouse Baig Mohammad, **S.Shitharth**,' Wireless sensor network and IoT based systems for healthcare application', Materials Today Proceedings, Elsevier, March 2021, https://doi.org/10.1016/j.matpr.2020.11.801.
- Gouse Baig Mohammad, S.Shitharth, Revanth Kumar,' Integrated Machine Learning Model for an URL Phishing Detection', International Journal of Grid and Distributed Computing, Vol.14, Issue 1, 2020, pp.513-529.
- K.Sangeetha, S.Venkatesan, **S.Shitharth,** "Security Appraisal Conducted on Real Time SCADA Data Set Using Cyber Analytic Tools", Solid State Technology, vol. 63,Issue. 1s, 2020, pp.1479-1491.
- **S.Shitharth**, korukonda Manimala, Bhavani, "Real Time Analysis of Air Pollution Level in Metropolitan Cities by Adopting Cloud Computing based Pollution Control Monitoring System using Nano Sensors", Solid State Technology, vol. 63, Issue. 2s, 2020, pp.1031-1045.
- **S.Shitharth**, Masood Shaik, Sirajudeen, Sangeetha, 'Mining of intrusion attack in SCADA network using clustering and genetically seeded flora based optimal classification algorithm', Information Security, IET, vol. 14, Issue 1, 2019, pp. 1-11
- **S.Shitharth**, & D.Prince Winston, D 2017, 'An Enhanced Optimization algorithm for Intrusion Detection in SCADA Network', **Journal of Computers and Security**, Elsevier, vol. 70, pp. 16-26.
- **S.Shitharth**, D.Prince Winston, "A Comparative Analysis between Two Countermeasure Techniques to Detect DDoS with Sniffers in a SCADA Network", Procedia Technology, Vol.21, 2015, pp.179-186.
- **S.Shitharth,** D.Prince Winston, "A New Probabilistic Relevancy Classification (PRC) based Intrusion Detection System (IDS) for SCADA network", Journal of Electrical Engineering, Vol.16, No.3, 2016, pp. 278-288.
- **S.Shitharth,** D.Prince Winston, "An Appraisal on Security Challenges and Countermeasures in Smart Grid", International Journal of Applied Engineering Research, Vol.10, No.20, 2015, pp. 16591-16597.
- **S.Shitharth,** D.Prince Winston, "A Novel IDS technique to detect DDoS and Sniffers in Smart Grid", IEEE explore, Oct 6 2016, DOI: 10.1109/STARTUP 2016. [Conference Proceedings]
- **S.Shitharth**, D. Prince Winston, "Comparison of PRC based RVM classification versus SVM classification in SCADA network", Journal of Electrical Engineering, Vol.17 (1), Jan 2017, pp. 318-331.
- **S.Shitharth**, D.Prince Winston, "An Optimal feature selection based on evolutionary algorithm for Intrusion detection", International Journal of Printing, Packaging & Allied Sciences, 2017, Vol.13, pp. 165-172.
- **S.Shitharth**, T.Manikandan, "Removal of Selective Black Hole Attack in MANET by AODV protocol" in International Journal Of Innovative Research In Science, Engineering And Technology , Vol.3, Special Issue 3, March 2014, pp. 2372-2377.
- C.Senthil Kumar, C.Sebastian Albina, **S.Shitharth,** T.Manikandan, "Modified TSR protocol to Support Trust in MANET using fuzzy" in International Journal Of Innovative Research In Science, Engineering And Technology , Vol.3, Special Issue 3, March 2014, pp. 2551-2555.