Faculty Profile

Dr. Sunil K Moon
BE(E&TC),ME(Digital System)
Ph.D (Electronics Engg)

HOD and Associate
Professor, Dept. of
Electronics and
Computer Engg.,
PICT, Pune
+91 98 22314570 , 9579343940

skmoon@pict.edu
msunil2k@rediffmail.com
skmoon1974@gmail.com

➢	QUALIFICATION :		
	• 2017	Ph. D. E & TC Engg.	RTM Nagpur University, India
	• 2009	Master of Engg. (M.E) E & TC Engg.	SCOE , Pune , India
	• 1998	Bachelor of Engineering (B.E.) E & TC Engg.	Government College of Engg.Amaravti, India

➢	RESEARCHER ID :		
	• **Scopus ID**	:	**https://www.scopus.com/authid/detail.uri?authorId=56031495500**
	• **ORCID ID**	:	**https://orcid.org/my-orcid?orcid=0000-0002-8828-6300**
	• **Google Scholar Link**	:	**https://scholar.google.com/citations?user=cdvaZYEAAAAJ&hl=en**

➢	PROFESSIONAL EXPERIENCE:
	EXPERIENCE (TEACHING): (Latest first)

	PICT,PUNE	Associate Professor	01/04/2017	Till date
	PICT,PUNE	Assistant Professor	31/12/2009	31/03/2017
	PICT,PUNE	Lecturer	10/07/1999	30/12/2009

EXPERIENCE (INDUSTRY): (Latest first)

	Techno India Pvt Ltd (Total six months)	Service and Temp Production Engg	Jan 1999	June1999

➢	CORE COMPETANCY AREAS:

	- Data Security
	- Information Security
	- Steganography
	- Watermarking
➢	**FACULTY DEVELOPMENT PROGRAMS ATTENDED:**
	- Attended one weak FDP on NEP in 2022
	- Attended two weak FDP on Cyber security
	- Successfully Attended three ATAL FDP on cyber security
➢	**RESOURCE PERSON:**
	- **Delivered expert lecture on TTL and CMOS logic family at MAE Aladndi**
	- **Delivered expert talked on Noise in Analog Communication at NSCOE Bhor Pune**
	- **Delivered expert talked on Principal of Communication System Unit 2 at BVCOE Pune**
	- **Delivered expert talked on Noise in Analog Communication at NSCOE Bhor Pune**
	- **Delivered expert talked on Combinational Logic Circuit and Sequential logic circuit at SCOE Pune under SPPU syllabus FDP**
	- **Delivered expert talked on Practical difficulties session of Digital Circuit at SCOE,Pune under SPPU syllabus FDP**
	- **Delivered expert lecture on cyber security STTP**
➢	**INDUSTRIAL VISIT:**
	- Organized and visited to Akashwani Hadapsar for SE E&TE students
	- Organized and visited to Aarvi Space Station for BE E&TE students
➢	**SEMINARS AND WORKSHOPS:**
	WORKSHOPS/SEMINARS ATTENDED:

- Two Weak Artificial Intelligence & Machine Learning Using Python, National Social Summit, IIT Roorkee during 17th- 28th May 2020
- One week HANDS-ON Faculty Development Program on Artificial Intelligence using Python, from 14-09-2020 to 19-09-2020
- One weak AICTE Sponsored STTP on Embedded System Design with IOT, 27th July to 1st Aug 2020.
- One Week Faculty Development Programme on "ICT based tools and its applications in teaching learning process" 27th May - 02nd June 2020.
- 4 days FDP OF PCS ,BOS SPPU PUNE,18 -22 Jan 21
- 4 days FDP OF DC ,BOS SPPU PUNE, 22 /06/20 to 27 /06 20
- One Week Online Faculty Development Program on MOODLE LEARNING MANAGEMENT SYSTEM, Spoken Tutorial, IIT Bombay, during 26th May to 30th May 2020
- One Week Online Faculty Development Program on research opportunities in E&TC .04 to 09 Aug. 20
- One Week Online Faculty Development Program on recent trends in technology and digital education 27 to 31 May 20
- One Week Online Faculty Development Program on recent trends in E7TC and computer science 06 June to 11 June 20
- Four weak certificate course on data science using python, National Institute of Electronics and Information Technology (NIELIT) Govt.of India .01 /06 20 to28/06/20
- One Week online Faculty Development Programme on Pedagogical Techniques in Electronics and Electrical Engineering (10th to 14 th August 2020) sponsored by TEQIP III organized by Department of Electronics Engineering, Walchand College of Engineering, Sangli
- One Week Online Faculty Development Program on MOODLE LEARNING MANAGEMENT SYSTEM, Spoken Tutorial, IIT Bombay, during 13 May to 18 May 2020
- One Week Online Faculty Development Program on cyber security ,IETE 07 to 12 /09 /20
- One Week Online Faculty Development Program on Deep Learning & Artificial Intelligence, IETE 27 /0720 to 01/08 /20
- One Week AICTE sponsored Advances in Biomedical Signal Processing with Hands-on', from 7th September to 12th September 2020
- One Week Online Faculty Development Program on Signal, Image & Video Processing: A Practical Approach (SIVPAPA-2020) under Technical Education Quality Improvement Program (TEQIP-III) organized by Department of Electronics & Telecommunication Engineering during May 26-30, 2020.

	• One Week AICTE Training And Learning (ATAL) Academy Online FDP on "Cyber Security" from 28-05-2020 to 01-06-2020 at National Institute of Technical Teachers Training & Research, Chandigarh. • One Week AICTE Sponsored STTP on COMPUTATIONAL TECHNIQUES, during 02nd - 07th November 2020. • One Week STTP on Raspberry pi using phyton 23 to 29 Aug.20 • One week Online Faculty Development Program on "Promoting Quality Culture in Technical Institutions" from 23th to 29th May 2020 Organised by Internal Quality Assurance Cell Under 'UGC Paramesh Scheme'.
➢	**RESEARCH PROJECTS/SCHEMES UNDERTAKEN BY TEACHERS:**
	FUNDED RESEARCH WORK :
	• One research proposal was ready of Rs. 34 lacs to submit SERB ,Govt of India • One research proposal sent to SERB on date 23 June 2022
➢	**EXTENSION ACTIVITIES:**
	• Always motivate students for their good health and regular fitness • Many innovative ideas are given to students for the project • Many books are given to economically backward and topper students • During this pandemic situation (Covid 19) donate many cloths and give financial support to economical greedy persons
➢	**EXAMINATION & CONTRIBUTION AT UNIVERSITY AND CURRICULAR DEVELOPMENT:**
	• Work as a Sport in charge(2011) • Anti-Raging Committee member • Overall practical in charge(2010/2011) • Active member of various Institute level committee like INC /Gathering /Robocon /Sport /Destock • Active member of various Institute level committee member for NBA/NAAC//LIC/Permanent affiliation • Member of sport committee. • Member Theory Exam committee.(SS) • Member of Gathering committee. • Member of Impetus and Concept. • Active member of Impetus and Concepts committee since 2003. Involved mainly in Venue and Logistics, judging and encouraging this activity among students. Working as ISO coordinator for the Impetus &Concept Function.

- Active member of Internal ISO Auditor team since 2010, worked as auditor for internal ISO audit as per internal audit plan since 2010.
- Active member of Dead Stock Verification committee since 2005
- Worked as member of PICT Hardware committee team member from 2005 to 2019.
- Active member of organizing committee for arranging visits by various bodies Like NBA, NAAC and LIC of UOP Pune. (Involved in arranging food, stay and transport).
- Involved in various report preparation of NBA and NAAC on criteria's as Suggested by HOD.
- Organized a various I industrial visit for SE and BE E&TC students. Failures in practical examination reduced
- SWD In-charge. Member of Grievance cell of PICT
- ISO Auditor
- Ant ragging committee member
- INC 2015. H/W committee In charge
- 22. Contributions outside the institute OR University level responsibilities
- Subject and practical chairman of SE E&TC DLD(2009/2010/2011)
- Subject Chairman of SE E&TC CT(2010/2011)
- Subject Chairman of FE BEE(2011)
- Work as staff selection committee member/LIC
- Regular member paper assessment (CAP)
- Worked as External Senior Supervisor at different colleges.
- Worked as Internal Senior Supervisor at PICT Pune many times.
- Regular Paper setter of UOP for SE subjects.
- Done Paper setting and assessment work for BVCOE Pune, UG and PG subject.
- Worked as Internal and External examiner for practical examinations of UOP.
- Active participation in CAP activity of UOP.
- Active participation in syllabus detailing workshops of UOP
- Theory Exam External Senior Supervisor.
- Set the syllabus of Digital Electronics, theory and practical for SE E&TC/Elex Revised 2013 syllabus.

	• Delivered the expert lecture on Unit 1 and Unit 2 of subject Digital Electronics to faculty of engg.(17-18 June 2013. Delivered the expert lecture on practical difficulties of Digital Electronics at MAE COE Aalndi (20 Oct.2013.) • Subject and practical chairman for Digital Electronics (DE) Since 2008-2014) and subject member for various staff selection and LIC committee
➢	**ACHIVEMENTS / AWARDS**
	• Published more than 30 papers in reputed free international journal having SCIE / Scopus indexing
➢	**MEMBERSHIP IN EDITORIAL BOARDS (REVIEWERS / TPC / SESSION CHAIR)**
	• IEEE ICIIP 2018 , Shimla ,India SESSION CHAIR • IEEE ICCICT 21(TPC) • Journal of Information and Processing System (JIPS, South Korea), Free Journal, Scopes Indexing, IF =0.4.(Reviewer) 2015 to Till date • Inderscience Journal, Free Journal, Scopes Indexing, IF =0.8.(Reviewer) 2015 to Till date • Many IEEE Conferences ,IEEE Transaction ,Springer Journal Reviewer) 2015 to Till date • Springer journal of MTAP Reviewers Indexing ,IF=2.8
➢	**EXPERT FOR PHD PROGRESS MONITORING:**
	• Dept. Ph.D Co-ordinator • Ph.D guide at SPPU, currently 05 PhD scholars are doing PhD
➢	**BOOKS/MONOGRAPHS:**
	BOOK PUBLICATIONS:
	• Sunil K Moon , Digital Logic Design ,Nirali Publication for SE E&TE and IT students
➢	**Copy right:** ENHANCING INFORMATION SECURITY AND ITS AUTHENTICATION WITH MULTIMODAL BIOMETRIC SYSTEM LITERARY/ DRAMATIC WORK Diary Number: 33531/2024-CO/L Date of Receipt: 24/10/2024
	UK base Patent: AI BASED BIOMETRIC LOCK FOR LUGGAGE AND EQUIPMENT SECURITY Design number: 6416109 Grant date: 14 January 2025 Registration date: 08 January 2025
	INVITED TALKS / SESSIONS

- Delivered expert lecture on TTL and CMOS logic family at MAE Aladndi

- Delivered expert talked on Noise in Analog Communication at NSCOE Bhor Pune

- Delivered expert talked on Principal of Communication System Unit 2 at BVCOE Pune

- Delivered expert talked on Noise in Analog Communication at NSCOE Bhor Pune

- Delivered expert talked on Combinational Logic Circuit and Sequential logic circuit at SCOE Pune under SPPU syllabus FDP

- Delivered expert talked on Practical difficulties session of Digital Circuit at SCOE,Pune under SPPU syllabus FDP

- Delivered expert lecture on cyber security STTP at GCOE Nagpur

➢ **RESEARCH PUBLICATIONS:**

SCI INDEXED / SCOPUS JOURNALS

Title	Name of Journal	Volume	Page	Year
Forensic Multi - Dimensional Ary Exploited Modified Direction Data Embedding Approach to Increase Imperceptibility and Robustness of Secured Data	Springer Journal of Multimedia Tools and Application. SCIE Indexing with I.F=2.8	Vol. 82, pages 35091–35120 (2023)		
Software and Hardware Based Audio-Video Crypto Steganalysis Model for Enhancing Robustness and Imperceptibility of Secured Data	Springer Journal of Multimedia Tools and Application. SCIE Indexing with I.F=2.8	Paper is published	Multimedia Tools and Applications volume 81, pages21047–21081 (2022)	
Authentication and Security Aspect of Data Security using Anti- Forensic Audio-Video Embedding Technique	6th Springer International Conference on Inventive Systems and Control ICISC 2022 6-7, January 2022 Coimbatore, India	Date of conference. 06/07/Jan/2022	Paper is presented in conference.	

Application of Forensic Audio-Video Steganography Technique to Improve Security, Robustness, and Authentication of Secret Data'	3rd edition of Springer International Conference on Computing Science, Communication and Security (COMS2)-2022	Date of conference 06/07/Feb/2022	Paper is presented in conference		
Hardware-based application of data security system using general modified secured diamond encoding embedding approach for enhancing imperceptibility and authentication	Springer Journal of multimedia tools and application. SCIE Indexing with I.F=2.8 August 2019,	SCIE Indexing I.F=2.8 Volume 78, Issue 15	pp 22045–22076	2019 DOI: 10.1007/s11042-019-7503-x	
"Anti-Forensic Reversible Multi Frame	Inderscience International Journal of	SCOPUS Indexing	Vol.14.No.3/4	2021	
Block to Block Pixel Mapping Information Concealing Approach to Increase the Robustness and Perceptibility"	Information and Computer Security. (Free Scopus Indexing journal)	I.F=1.2	pp.403-439.2021		
Information security model using data embedding technique for enhancing perceptibility and robustness	Inderscience Int. J. Electronic Security and Digital Forensics (Free Scopus Indexing journal	Vol.11, No.1	70-95	Jan. 2019 (Free Journal Scopus,	
Innovative data security model using forensic audio video steganography for improving hidden data security and robustness	Inderscience International Journal of Information and Computer Security	Vol.10, No.4	374-397	Oct.2018 (Free Journal Scopus, Emerging SCI indexing , ,H index = 9)	
Innovative Data Hiding Security Model using Forensic Audio Video Crypto-Steganography.	ICTACT International Journal on Commendation and technology	Vol.8, No.4	1633-1639	Oct.2017 (Free Journal, IF.= 0.75	
Ultra-Windband Co-located Diversity Antenna for Enhancing Channel Capacity	ICTACT International Journal on Commendation and technology	Vol.7, No.4	1379-1386	June.2016 (Free Journal, IF.= 0.75	

"Efficient Performance Analysis of Data Hiding Technique for Enhancement of Information Security, Robustness and Perceptibility''	Inderscience International Journal of Electronics Security and Digital Forensic(IJESDF)	Vol.7, No.4	305-325	July 2015 (Free Scopus Indexed, Emerging SCI indexing, RG Journal Impact: 1.10,H index = 9)
Application of data hiding in audio-video using anti forensics technique for authentication and data security	Advance Computing Conference (IACC), 2014 IEEE International	1110-1115	IEEE,	Scopus Indexed 2014
Analysis of Secured Video Steganography Using Computer Forensics Technique for Enhance Data Security	Image Information Processing (ICIIP), 2013 IEEE Second International Conference	660-665	IEEE,	Scopus Indexed 2013

Data Security Using Data Hiding	Conference on computational intelligence and multimedia applications,	247-251	IEEE,	Scopus Indexed 2007
Application of steganography on image file	IEEE Nat ional conference on Recent trends in Electronics, 2007	179-184	IEEE,	Scopus Indexed 2007
"Efficient Reversible Block to Block Mapping Information Embedding Technique for Robust and Secure Video Steganography using Forensic Detection'	Submitted to Springer Journal on Multimedia Tools and Application	SCI Indexing Status = Under Review.		Submission date (15 Dec. 2018, (SCI Expanded, Scopes Indexed, I.F = 1.5).
Software and Hardware Based Audio-Video Crypto Steganalysis Model for Enhancing Robustness and Imperceptibility of Secured Data	Submitted to Springer Journal on Multimedia Tools and Application	SCI Indexing Status = Under Review.		Date of submission 10/01/2021
Authentication and Security Aspect of Data Security using Anti- Forensic Audio-Video Embedding Technique	Paper is accepted in springer international conference	Scopus indexing		--
H Index	i Index	Total = 385		Google Scholar Citations 195
6	6			Research Gate(1.85) Citations 190

Dr. Sunil K. Moon
HoD E&CE DEPT.
Associate Professor PICT, Pune.