

CHITTAJIT SARKAR

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Objective

To work in an environment where my skills & experience would help to promote the goals and success of the organization. There are no geographical restrictions and I am willing to move anywhere to achieve this goal.

Research Work / Area

Ultra wide band Antenna

Summary

Over 17+ years of professional experience in R&D section and academic area with one year in LOOP Telecom, Taiwan, 10 projects in industry(India and Taiwan), various International journal publication and conferences.

Education

- **Ph.D.(Tech.)** in Radio-physics & Electronics, University of Calcutta (**submitted**)
- **M.Tech** in Radio-physics & Electronics, University of Calcutta in 2006(**78.56%**)
- **B. Tech** in Radio-physics & Electronics, University of Calcutta in 2001(**76.70%**)
- **B.Sc in Physics (Hons.)** From Ramakrishna Mission Residential College, Narendrapur, University of Calcutta in 1998(**68.00%**)
- **Higher Secondary**(WBCHSE) from S.T.P.S HIGH SCHOOL ,Purulia, WB, India in 1995(**73.90%**).
- **Madhyamik** (W.B.B.S.E) in 1993 from S.T.P.S HIGH SCHOOL, Purulia, WB,, India(**71.33%**).

Academic Field of Interest

Microwave, antenna technology, E.M theory, VLSI, embedded system, electronic circuit, Opto electronics, solid state devices and optical networking.

Industry Areas

DWDM system (Optical Networking) design, SDH network and devices ,FPFA design, VHDL coding,ORCAD schematic design, PCB layout,SLIC/CODEC IC interfacing, microcontroller based project,DSP IC(MSC711X) interfacing ,FXS interfacing,E&M interfacing, Embedded Hardware, System Hardware architecture design, signal integrity test, dc-dc converter design.

Development

- Transponder design for 80 channel DWDM system.
- Optical Supervisory channel module (OSC) design.
- Expertise in FPGA design, VHDL coding

- Very strong fundamentals and design experience in CPU, CODEC, DSP interfacing.
- Wide experience in all stages of development of large application projects using assembly, C.
- Expertise in Embedded real time control software using micro-controllers, PC based Control systems.
- Micro controller based ELECTRONIC GOVERNOR for diesel engine with KC8X196 micro-controller”. (*Fuel control system of diesel engine.*)
- Expertise in Microcontroller-based speedometer used in Metro-Rail.
- Very strong fundamentals and design experience in Analog, Digital and Power Electronic hardware. Expertise in Schematic and multi-layer PCB design Packages.
- Played key role in OMNIBUS(CONFERENCE card) project.
- Played key role in DTMF EOW project.
- Act as Assistant Manager for Hardware team.
- Act key role in HARDWARE VALIDATION team.
- Act key role in POWER Design –DC-DC converter.
- Act key role in DWDM system.

Skill set

Languages: VHDL, C, JAVA, ASSEMBLY LANGUAGE.
 Microprocessor/controller: 8051, 80196, MPC852, 8086, 8085
 Simulation software Tools: HFSS,CFDTD,P-Spice,PhytonKC196,
 Protel,Orcad,ModelSim,Loopterm,LT-Spice,
 Xilinx ISE8.1 simulator,Microwind ,ADS tool

Academic projects

Project work in M.Tech:

Title: Design, fabrication & Measurement of PIFA (Planar Inverted F-type Antenna)
 Antenna used in Mobile communication.

Project Work in B.Tech:

1. Optical Voice Link (optical communication with transmitter & receiver and optical fiber as a medium of communication).
2. Link up gradation by P-Spice simulation with LASER source.

Other academic profiles

Certificate course in UNIX & C from Calcutta University.

Awards:

- National Scholarship in B.Sc (Physics Hons.)
- Gold medal from R.K Mission Residential College
- N.C.C Certificate
- Brown belt (karate)
- on job project certificate from Loop Telecom Taiwan

Professional Projects:

- OMNI BUS System sponsored by LOOP TELECOM TAIWAN
- 88 channel DWDM system funded by Fibcom India Ltd.
- DTMF EOW system sponsored by TeL LAB Denmark and Fibcom India Ltd
- 300 watt power system for SDH network(6335 product) sponsored by Fibcom India Ltd;
- Local power section(LPS) design for 6335 product(SDH network) system sponsored by Fibcom India Ltd;
- ADSL modem sponsored by LOOP TELECOM TAIWAN and Prima Tel
- ELECTRONIC GOVERNOR for Diesel Engine sponsored by Stesalit Limited
- Fault diagnostic system for railway Electric engine sponsored by Stesalit Limited
- AC controller for railway coaches sponsored by Stesalit Limited
- SPEEDO METER for metro railway sponsored by Stesalit Limited

Professional Experiences (current job onwards)

Period: 1 July 2011 till Date

Institute: Swami Vivekananda Institute Of Science and Technology

Description: Working as Associate Professor and HOD in ECE Department.

Period: 1 April 2008 till 30 June 2011

Company: Fibcom India Limited

Description: Worked as Assistant Manager (R&D).

Period: 3 October, 2006- 31 March, 2008

Company: Prima Tel India Limited and Loop Telecommunication International Taiwan (tied up in R&D section)

Description: Worked as Senior Executive (R&D).

Period: January, 2004 –Sept, 2006

Company: Heritage Institute of Technology, Kolkata, India.

Description: Worked as Lecturer.

Period: August, 2001 –December 2003

Company: Stesalit Limited, Kolkata, India.

Description: Worked as Hardware Engineer.

Course Offered

- Antenna Theory and Propagation (SVIST, July ' 12 onwards)
- Micro electronics and VLSI (SVIST, July ' 12 onwards)
- Microprocessor & Microcontroller (SVIST, July ' 12 onwards)
- Embedded system (SVIST, , July ' 12 onwards)
- E.M Theory and Transmission Line (SVIST, July ' 12 onwards)
- CMOS Digital Logic Design (R.K Mission, Narendrapur, January ' 12 onwards)
- Industrial Electronics (IIP, Feb ' 17 onwards)
- EDA for VLSI (SVIST, 2011-2012)
- Telecommunication Engineering (SVIST, 2011-2012)
- Advance Communication (SVIST, 2011-2012)
- Microprocessors (Jadavpur University, 2013- 2014)
- Optoelectronics and Optical Fiber Communication (HITK, from 2004- 2006)
- EM Theory, Antenna & Propagation (HITK, 2004 to 2006)
- Basic Electronics (HITK, SVIST several times)

Research Activities and Paper Publication:

Title of Thesis:

“Improved Design of Ultra Wideband Printed Antennas with Frequency Notched Characteristics”

PhD Guide:

Dr. J.Y Siddiqui, Institute Of Radio physics and Electronics, University of Calcutta

List of Publications related to PhD work

1. Jawad Y. Siddiqui, Chinmoy Saha, **Chittajit Sarkar**, Latheef A. Shaik, and Y.M. M. Antar **“Ultra-Wideband Antipodal Tapered Slot Antenna With Integrated Frequency Notch Characteristics”** *IEEE Transactions on Antennas and Propagation*, vol. 66, no. 3, pp. 1534-1539, March 2018.
2. Chittajit Sarkar, Jawad Y. Siddiqui, Latheef A. Shaik, Chinmoy Saha, and Y.M.M. Antar **“Frequency Notched Balanced Antipodal Tapered Slot Antenna With Very Low Cross-Polarized Radiation”** in *IET Microwaves, Antennas & Propagation 2018*. (DOI: 10.1049/iet-map.2018.0051)
3. C Sarkar ,J.Y Siddique **“Frequency Notch Characteristics of UWB Monopole Antenna Embedded with A Spur Line Resonator ”**communicated to *IEEE Antenna and Wave Propagation Letters 2018*.
4. Chittajit Sarkar, Latheef A Shaik, Jawad Y Siddiqui, Chinmoy Saha, Yahia M M Antar **“Balanced Antipodal Tapered Slot Antenna With Low Cross-Polarized Radiation”** will be published in *IEEE International Symposium on Antennas and Propagation & USNC/URSI National Radio Science Meeting San Diego, California USA ,9-14 July,2017*
5. C Sarkar ,C.Saha,J.Y Siddique **“An Antipodal Tapered Slot UWB Antenna with Frequency Notch Characteristics”** published in *15th Biennial International Symposium on Antenna and Propagation APSYM-2016,pp201-204,December15-17,Kochi (Available at IEEE explorer)*.
6. C Sarkar ,L.Shaik ,C.Saha,J.Y Siddique **“Spur Line Embedded Micro Strip-Fed Frequency Notched UWB Linear Taper Slot Antenna ”**published in *CODEC 2015 ,December17-19,Kolkata, 2015*.
7. C Sarkar ,C.Saha,J.Y Siddique **“Double Spur Line Loaded Micro Strip-Fed UWB Linear Taper Slot Antenna with Dual Frequency Notch characteristics”** published in *IEEE Antenna Week 2015 ,May 30 - June 03, 2015*.
8. C Sarkar ,C.Saha,J.Y Siddique **“A Spur Line Loaded Microstrip-Fed UWB Linear Taper Slot Antenna with Frequency Notch Characteristics”** published in *14th Biennial International Symposium on Antenna and Propagation APSYM-2014,pp 244-247,December17-19,Kochi*.

List of Publications apart from PhD work

1. Chittajit Sarkar, "***Some Parametric studies on Vivaldi Antenna***" published in ***International Journal of u-and e-Service, Science and Technology***, Vol.7, No.4 pp.323-328 August, 2014,ISSN: 2005-4246 IJUNNEST
2. Chittajit Sarkar, "***Synchronous Fly Back Converter Implementation***" published in ***International Journal of Electronics and Electrical Engineering IJEEE***, Vol. 3, No. 2, pg95-99 April, 2015, ISSN: 2301-380X
3. Chittajit Sarkar, "***Hot-swap circuit Implementation***" published in ***International Journal of Electronics and Electrical Engineering IJEEE***, Volume 1,No.4,pg236-239 December-2013, ISSN: 2301-380X
4. Chittajit Sarkar, "***Interfacing of 8 Channel Optical MUX DEMUX in DWDM System***"published in***International Journal of Scientific & Engineering Research***, Volume 4, Issue 03, March-2013, ISSN 2229-5518
5. Chittajit Sarkar, "***Engineering Order Wire Implementation***" published in***International Journal of Engineering and Technology***, U.K Volume 3, Issue 2, February-2013, ISSN 2049-3444
6. Chittajit Sarkar, "***Implementation of Optical Performance Monitor Module Interfacing in DWDM system***"published in***International Journal of Multidisciplinary Sciences and Engineering***, Volume. 3, No. 11, November 2012 pg, 12-15,ISSN 2045-7057
7. Chittajit Sarkar, "***A Nobel Implementation of Line driver***"published in ***International Journal of Scientific & Engineering Research***, Volume 3, Issue 12, December-2012, ISSN 2229-5518
8. Chittajit Sarkar, "***Optical Supervisory Channel Implementation***" published in ***International Journal of Scientific & Engineering Research***, Volume 3, Issue 11, November-2012, ISSN 2229-5518

Professional Affiliations

Member of Ex. Comm., IEEE Kolkata Section, Kolkata, India since 2015

Treasurer AP-MTT Chapter Kolkata (2017-2018)

Member, IEEE LEOS Chapter, IEEE Kolkata Section (2004-2006)

Conference, Workshop Short Term Courses: Attended

- A Distinguished Lecture (DL) Program “**Antennas for Wireless Communications and for sensors: Some Recent Advances and Future Trends**” by Dr Yahia M. M. Antar from Royal Military College of Canada, organized by IEEE AP-MTT Kolkata chapter, 13th March 2018.
- A Lecture Meeting Program “**Floquet modal based Analysis of Finite and Infinite Phased Array Antennas**” and “**Advanced Horn structures for Reflectors and Phased Arrays**” by Dr Arun K. Bhattacharyya from Lockheed Martin Space Systems, Colorado, USA , organized by IEEE AP-MTT Kolkata chapter, 19th Feb 2018.
- One day workshop on “**Setting A Horizon of Antennas (SAHA)**” organized by IEEE AP-MTT Kolkata chapter, 26th October 2017.
- Attended One day seminar on “**Advanced Antenna Systems for 21st Century Satellite Communication Payloads**” by *Distinguished Lecturer*: Dr. Sudhakar Rao **Northrop Grumman Aerospace, USA**, organized by IEEE AP-MTT chapter Kolkata, 30th March 2017, at Institute of Radio physics& Electronics, University of Calcutta.
- Attended One day workshop on “**ANTENNA RESEARCH: Challenges and success**” organized by IEEE AP-MTT chapter Kolkata, 10th Feb 2017, at CRNN, University of Calcutta.
- Attended and presented paper in International Symposium “**APSYM 2016**” at Kochin University of Science and Technology at Kochin, Kerala, India during 15-17th December 2016.
- Attended and presented paper in “**CODEC-2015**” organized by Institute Of Radiophysics& Electronics and sponsored by IEEE AP-MTT chapter Kolkata at Swissotel Kolkata, during 17-19th December, 2015.
- Attended and presented paper in “**Indian Antenna Week**” organized by IEEE AP-MTT chapter Kolkata at Ajmer, Rajasthan , during May 30- June 03 , 2015.
- Attended One day workshop on “**DRA RESEARCH: An Experience over the Last Decade**” organized by IEEE AP-MTT chapter Kolkata, 15th May 2015, at CRNN, University of Calcutta.
- Attended Two day workshop on “**A Generation of Antenna And GTLM**” organized by IEEE AP-MTT chapter Kolkata, 7th and 8th May 2015, at CRNN, University of Calcutta.

- Attended and presented paper in International Symposium “**APSYM 2014**” at Kochin University of Science and Technology at Kochin, Kerala, India during 17-19th December 2014.
- Attended one day workshop on “**OPLINK product by China expert**” organized by FIBCOM India Ltd. Gurgaon, India 7th June 2010, at Gurgaon, Haryana.
- Attended one day workshop on “**Optical supervisory card by Gemstone team**” organized by FIBCOM India Ltd. Gurgaon, India 5th April 2010, at Gurgaon, Haryana.
- Attended one day workshop on “**DWDM Technology by Expert from China**” organized by FIBCOM India Ltd. Gurgaon, India, 8th February 2010, at Gurgaon, Haryana.
- Attended one day workshop on “**Analog circuit design**” organized by Intersil, November 7th, **2009** at Crown Plaza New Delhi, India.
- Attended one day workshop on “**Power management by T.I**” organized by **Texas Instrumentation (TI)**, March 14th, **2009** at Crown Plaza New Delhi, India.
- Attended three day workshop on “**E-1 line and PDH network**” organized by **Loop Telecom International Taiwan**, 13-15th March 2007, at Loop Telecom Taiwan.
- Attended three day workshop on “**FPGA design and VHDL Coding**” organized by **Loop Telecom International Taiwan**, 8-10th January 2007, at Loop Telecom Taiwan.

Conference, Workshop Short Term Courses: Organized

- One day “**Students Colloquium**” organized by IEEE AP-MTT Kolkata chapter, 1st May 2018. **(Treasurer)**
- One day workshop on “**Setting A Horizon of Antennas (SAHA)**” organized by IEEE AP-MTT Kolkata chapter, 26th October 2017. **(Treasurer)**
- One day workshop on “**ANTENNA RESEARCH: Challenges and success**” organized by IEEE AP-MTT chapter Kolkata 10th Feb 2017, at CRNN, University of Calcutta. **(Treasurer)**
- “**Seminar on Antenna Technology**” organized by Department of Electronics & Communication Engineering, Swami Vivekananda Institute of Science, 30 Jan 2017 **(program Chair)**.
- “**Workshop on Embedded System (WES-15)**” organized by Department of Electronics & Communication Engineering, Swami Vivekananda Institute of Science, 4th & 5th October, 2015 **(program Chair)**.

- **“Workshop on Circuit Simulation (WCS-15)”** organized by Department of Electronics & Communication Engineering, Swami Vivekananda Institute of Science, 22th & 23th July, 2015(**program Chair**).
- **“Workshop on Robotics”** Jointly organized by Department of Electronics & Communication Engineering, Swami Vivekananda Institute of Science and Technology & IIT Bombay, 25th & 26th August, 2014(**program Chair**).
- **“Short Term Course on Optical Network and Power Electronics”** organized by Department of Electronics & Communication Engineering, Swami Vivekananda Institute of Science and Technology, 2nd July to 5th July, 7th July, 2014(**program Chair**).
- **“Workshop on Embedded System”** Jointly organized by Department of Electronics & Communication Engineering, Swami Vivekananda Institute of Science and Technology & Variable Energy Cyclotron Centre (VECC) Government of India, April 12th, 2014(**program Chair**).
- **“National Seminar on Embedded System”** Jointly organized by Department of Electronics & Communication Engineering, SVIST & IEEE Circuit and System Society (CASS) Kolkata Chapter, 5th October '2013 (**program Chair**).
- **“National Seminar on Microwave and Optical Communication Systems”**, Jointly organized by Department of Electronics & Communication Engineering, SVIST & IEEE AP-MTT Kolkata Chapter, IEEE Kolkata Section, Sept 21-22'2012 (**Secretary**)

Technical Fest:

Convener of Tech Fest 2015

TECH FEST **‘Innovention - 2k15’** on 11th and 12th of April, 2015

Exam Cell:

Officer -In-Charge (OIC) 2015-2016

Cultural Fest:

Convener of Cultural Fest 2016 -2017

Names and addresses of three Referees

Name	Dr. J.Y.Siddiqui	Dr. D.Guha	Mr. Cannie
position	Associate Professor	Professor &HOD	Technical director –R&D (Loop Telecom Taiwan)
Address	Institute Of Radio Physics & Electronics University Of Calcutta ,92, A.P.C. Road,Kolkata-700009	Institute Of Radio Physics & Electronics University Of Calcutta ,92, A.P.C. Road,Kolkata- 700009	Loop Telecommunication International(Taiwan) 6F, No.36 alley38, lane358, RueiGuang Rd. NeiHu,Taipei 11492, Taiwan
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Personal Information:

Father's Name: Shanti Sarkar

Present address:

256 N.S Road, Mayfair Eternity, Flat No.A-404,P.O-Malanha Mahinagar, P.S-Sonarpur,Kolkata-700145, India.

Date of Birth: 03.01.1977
Sex/Martial Status: Male/Married
Nationality: Indian
Languages: English, Hindi, Bengali.

Declaration:

I hereby affirm that all the information given above is true and correct to the best of my belief and knowledge.

Place: KOLKATA



(CHITTAJIT SARKAR)