

REDEEM

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Quarterly Newsletter

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DEPARTMENT OF ELECTRICAL AND
ELECTRONICS ENGINEERING

SSN COLLEGE OF ENGINEERING

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From HoD's Desk...

It gives me immense pleasure in bringing October issue of newsletter. This time, the management approved 24 internally funded student projects and 2 faculty funded projects. Congratulations and appreciation to the faculty and students who have obtained the projects from the management. Our alumni, Ms. Swathi Murugan and Mr. Anirudh addressed the students regarding the importance of appearing in competitive examinations and taking up Masters program in US. Dr.V.Rajini participated in the workshop on "Promoting Technological Innovations" in CSR-IIT Madras and also submitted a CSR proposal. We appreciate efforts taken by Dr.N.Pandiarajan for the re-orientation of 10kW roof top solar power plant. This project is also approved by the management. I am happy to notice that our faculty are taking efforts in writing books for reputed publishers. The new NBA guidelines give importance to book writing activities. Congratulations and appreciation to office bearers of the Eupraxia - 2015 and the faculty coordinator, Dr.N.Pandiarajan.

Preface

Intuitive eyes notice subtle stuff, like how the most of your everyday actions and decisions are ordered by your hidden fears. You just need to calm yourself down long enough to become comfortable with the world that exists within. As you quieten your mind and hush the turbulent waves inside, you slowly begin to see the lucid depths below - all the way to the bottom where your fears lurk. Pull out that fear. Now start auditing your mind. Do you notice how a worry rises like a bubble, twirling and growing in size, how it winks the surface and becomes a thought or a decision. As you watch - pop! Another worry breaks. You see yourself unconsciously thinking the same old worn out thoughts you just finished thinking a while back. Or, you notice how you suddenly arrived at a decision to do something. In a flash of understanding you realize that both the thought and the decision were totally wrong, simply because it will increase the fears leading to more of the same.

Flash! A sword appears from nowhere and cuts that thought off throwing it away - or reverses that decision and resets your mind. This clear-sighted intuition is your chief weapon in this war against yourself which happens within yourself. In time, you will learn to use it like a scalpel to cut away dead parts of your mind that are rotting away. Sometimes all it takes is a mental shout that says, "Go Away!" and the old dumb fear will take its leave. Sometimes you observe that, much damage has already happened and needs serious working on.

You roll up the sleeves and pull out the sword to slash your fears away. All war is serious business, when the battle is against you, it's even more serious. Become a true warrior. Rise and destroy your fears one by one. As the worries leave, as the scars heal, you will feel a sense of lightness within - rising happiness, a sudden bark of laughter, a quick hop step, a joy unreasonable, unfathomable, unannounced. You'll taste the present moment in all its spontaneity, and as you feel this delight, as you do this victory lap you'll know why it was worth fighting the battle.

Curiosity conquers fear. Unfortunately the education as we know it; does not teach us how to acquire this. The curiosity, equanimity and stability and so we end up with living with insecurity irrespective of the position we are in. We always try to grab fruit without knowing the root and so we lack a comprehensive approach towards everything in life. We want only pleasure, not enjoyment. We cannot enjoy the beauty of the very process of life unless we understand certain fundamentals of life. We are always shaky and uncomfortable with ourselves and lack elaborate thought process. So we end up with substandard work. We often search key for a door which is already opened, due to lack of insight. A true professional will always strive to make something beautiful, new and useful.

True courage is not absence of fear but conquering it - Nelson Mandela.

JOURNAL PUBLICATIONS



Dr. U.Shajith Ali, ASSP/EEE published a paper titled "Z-Source DC-DC Converter with Improved Perturbation and Observation Algorithm for Photovoltaic Systems", in International Journal of Applied Engineering Research, 2015, Vol.10, No.2, pp. 1341-1345. [ISSN 0973-4562][Listed in Anna University Annexure-II]

B.Ramasudha and Dr. U.Shajith Ali, ASSP/EEE published a paper titled "Bidirectional Quasi Z-Source Converter Based Flywheel Energy Storage System", 2015, International Journal of Applied Engineering Research, 2015, Vol.10, No.2, pp. 1351-1355. [ISSN 0973-4562][Listed in Anna University Annexure-II]

T.P. Rajalakshmi, Dr. U.Shajith Ali ASSP/EEE published a paper titled "Isolated Quasi Z-Source DC-DC Converter for Superconducting Magnetic Energy Storage System", 2015, International Journal of Applied Engineering Research, 2015, Vol.10, No.2, pp. 1456-1459. [ISSN 0973-4562][Listed in Anna University Annexure-II]

Tamizhselvan Annamalai, Dr. V.Rajini published a paper titled, "A Novel Control Scheme for Power Factor Improvement in Modified Bridgeless Boost Converter", Applied Mechanics and Materials Vol. 787 (2015) pp 833-837.

Dr. V.Rajini published a paper titled "Investigations on Hysteresis-Based Current Control Techniques for Grid Connected Photovoltaic Systems" in the Journal of Engineering Research Vol. 12, No. 1 (2015) 32-43.

T.Nivedhitha, S.Sahithya, G.Vaishnavi (IV Year EEE,B) and Dr. R.Seyezhai, ASSP/EEE, published a paper titled, "Simulation of High Step-up DC-DC Converter for PV Applications" in International Journal of Science and Innovative Engineering & Technology, May 2015 Issue Volume 1, ISBN 978-81-904760-6-5.

S.Krishnaveni, Dr. V.Rajini, Rajes, "Development of PEF Source in Nanosecond Range for Food Sterilization' accepted in Journal of energy systems.

Dr. R.Seyezhai, ASSP/EEE published a paper titled, "Analysis of PWM Strategies for z-source Cascaded Multilevel Inverter for Photovoltaic Applications", U.P.B. Sci. Bull., Series C, Vol. 77, Iss. 2, 2015 ISSN 2286-3540. (AU, Annex.-II).

Dr. R.Seyezhai, ASSP/EEE, P.Dhivya and V.Chamundeeswari (Part-time Research Scholar) published a paper titled, " Design and Implementation of Perturb and Observe (P&O) MPPT Technique for Negative Output Super-Lift Luo Converter", Applied Mechanics and Materials Vol. 787 (2015) pp 888-892 Submitted: 2015-02-09, © (2015) Trans Tech Publications, Switzerland, (AU, Annex.-II).

Dr.V.Rajini and S.Krishnanveni, published a paper titled "Implementation of an Economical and Compact Single MOSFET High Voltage Pulse Generator" in Indian Journal of Science and Technology, Vol 8(17), 62205, August 2015, ISSN (Print) : 0974-6846 Annexure II

Dr.R.Seyezhai, ASSP/EEE and N.Hemalatha (Research Scholar) published a paper titled, "A", International Journal of Applied Engineering Research (IJAER), Volume 10, Number 12 (2015).

Dr.R.Seyezhai, ASSP/EEE and S.Dharani (passed out M.E. Student) published a paper titled, "Development of Simulator and MPPT Algorithm for PEM Fuel Cell", Communications on Applied Electronics (CAE), USA Volume 2 – No.7, August 2015– ISSN : 2394-4714. This work was funded by SSNCE under students project internal funding.

Dr.R.Seyezhai, ASSP/EEE, M.Suudharshana and, S.Srivignesh (IV Year EEE,B), published a paper titled "Simulation and prototype implementation of phase shift full bridge DC-DC converter" in Global Journal of Advanced Engineering Technologies Volume 4, Issue 3- 2015, ISSN (Online): 2277-6370 & ISSN (Print):2394-0921. This work was funded by SSNCE under students project internal funding.

S. Malathy (AP) and Dr. R. Ramaprabha (Assoc. Prof), published a "Comprehensive Analysis on the Role of Array Size and Configuration on Energy Yield of Photovoltaic Systems under Shaded Conditions", International Journal on Renewable & Sustainable Energy Reviews (ISSN 1364-0321), Vol. 49, pp. 672-679, September 2015. SJR Impact factor 3.273, (DOI: <http://dx.doi.org/10.1016/j.rser.2015.04.1659540>), Thomson Reuters Impact factor : 5.5

Subramoniam M , Barani S and Dr. Rajini V, published a paper titled "A non-invasive computer aided diagnosis of osteoarthritis from digital x-ray images", Biomedical Research 2015; 26 (4): 721-729, ISSN 0970-938X(annexure 1)

K. N. Dinesh Babu, G. R. Manjunatha, Dr. R. Ramaprabha, Dr. V. Rajini, M. V. Gopalan, published a paper titled "Smart Monitoring and Control of Tap Changer Using Intelligent Electronic Device" in World Academy of Science, Engineering and Technology, International Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering Vol:9, No:8, 2015, pp 723-728

K. N. Dinesh Babu, G. R. Manjunatha, Dr. R. Ramaprabha (Assoc. Prof./EEE), Dr. V. Rajini, M. V. Gopalan, published a paper titled "Smart Monitoring and Control of Tap Changer Using Intelligent Electronic Device", International Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering, World Academy of Science , Engineering and Technology Publishers, (ISSN: 2010-376X, E-ISSN: 2010-3778), Vol. 9, No.8, pp. 723-728, August 2015. SJR Impact factor 0.13.

Dr.R.Seyezhai, ASSP/EEE, Mounica Ganta, Pallamreddy Nirupa and Thimmadi Akshitha (passed out UG Students) published a paper titled, " Dynamic Analysis of Interleaved Boost Converter for Fuel Cell Applications", Journal of Engineering and Interdisciplinary Research: 2015, 2 (1):1-9, ISSN No: 2349-378X.

V.Rajini, P.Anto Jaily (Research Assistant) published paper titled, "An Insight in to fly back converter for various applications" International Journal of Electrical and Electronics Engineering Research (IJEEER) ISSN(P): 2250-155X; ISSN(E): 2278- 943X, Vol. 5, Issue 5, Oct 2015, 71-84. Thomson reuters indexed

Dr.R.Seyezhai ASSP/EEE and P.Vaishnavi (Passed out PG Student) published a paper titled, "Simulation and Performance Analysis of a Novel Seven-Level inverter with DC-DC Converter for Photovoltaic System", International Journal of Engineering and Applied Sciences (IJEAS) ISSN: 2394-3661, Volume-2, Issue-8, August 2015. pp.66-71.

Dr.R.Seyezhai, ASSP/EEE and N.Hemalatha (Research Scholar) published a paper titled, "A Review Of Extended Boost Quasi Z-Source Inverter Topologies for PV Applications", in International Journal of Applied Engineering Research (IJAER), Volume 10, Number 12 (2015).

CONFERENCES AND WORKSHOPS

Umarani AP/EEE Attended an international conference SESEM 2015 (Sustainable Energy Systems and Energy Management) and presented a paper titled "Total Power Control for Quasi Z-Source Inverter based Grid-Tie Single Phase Photovoltaic System" at Anna University, Trichy

Dr Muthuselvan M B ASSP/EEE attended Workshop on, "Simulation of Power System Transients EMTP-RV" conducted by Department of Electrical and Electronics Engineering, College of Engineering, Guindy, Anna University.

Kapildev Kumar A, P Preeti, Kotte Sai Teja, Agil K, Aishwarya S, Aishwarya V, Ajithkumaar A S, Akash K A, Anirudh C, Anirudh V Sridharan, Anish Kumar G, Aravind K R, Aravind Kumar R, Aravinthraj T, Arjun B V, Arjun P, Arun Prasaath B, Aswinee S., Bharath Kumar R, Chozha Nangai V P, Dharshini S R, Gayathri M, Haritha V, Isha Pathania, Jason Paul Darivemula, Kavin D, Kavin Kumar S, Kavitha C, Kaviya R, Keerthana T, Kohul M, Lalith Raj S, Mirudhulla B, Muthamilselvan S, Narendran S, Naveen Venugopalan, Nijandhan D, Nirmalnathan Y, Pappu Anusuya M, Pavethra R S, Praneeth P, Manikandan S, Balakrishna A V of II year - A section students participated in "PCB WORKSHOP", organized by the Department of EEE, SSN College of Engineering.

Narenraju N, Akshay Kumar K, P Preeti, Kapildev Kumar A, Aishwarya S, Dharshini Bala S, Haridha V, of II year - A section students participated in "LABVIEW WORKSHOP", organized by the Department of BME, SSN College of Engineering.

Dr.R.Seyezhai, ASSP/EEE & Dr Mrunal Deshpande ASSP/EEE attended the National Workshop on, "Design of Digital Controllers in FPGA using MATLAB System Generator- Hands on" at SSNCE.

Dr. R. Ramaprabha, Assoc. Prof. inaugurated MNRE sponsored two days Technical Seminar on "Computational Intelligence Applications to Renewable Energy" during 7th& 8th August 2015 at Einstein College of Engineering, Tirunelveli. She also delivered a lecture on "Soft Computing Techniques for Solar Photovoltaic Systems" on 7th August 2015 in the workshop.

Dr.R.Seyezhai, ASSP/EEE and Mr.M.Rasu (RA) presented a paper titled, "Analysis, simulation and prototype implementation of tapped inductor interleaved boost converter for PV applications" in the National Conference on Technological Advances in Mechanical Engineering, TAME 2015 held at Veltech Hightech Dr.Rangarajan Dr.Sakunthala Engineering College, Avadi, Chennai.

Dr.R.Seyezhai, ASSP/EEE and D.Umarani, AP/EEE presented a paper titled, "Total Power Control for quasi z-source inverter based grid tie single phase photovoltaic system" in the National Conference on Technological Advances in Mechanical Engineering, TAME 2015 held at Veltech Hightech Dr.Rangarajan Dr.Sakunthala Engineering College, Avadi, Chennai.

Dr.R.Seyezhai, ASSP/EEE and Ms Umarani, AP, EEE attended the two day workshop on, "Solar PV System Designing" at School of Electrical Engineering, VIT, Chennai.

Dr.V.Rajini attended CII Workshop on promoting technology innovations in CSR – Learning from Indian Institute of Technology, Madras (IITM)

GRANTS AND FUNDING

The Programme Monitoring Committee (PMC) from the Ministry of New and Renewable Energy (MNRE) visited EEE department on 19-8-2015, to monitor the progress of the project titled, "A Novel Fused Converter for Solar wind hybrid systems to power rural Telephony". The committee members were

- Shri J.P.Singh , Former Director, SWES, MNRE
- Shri Rajesh Katyal, Deputy Director, NIWE
- Shri. Haribhaskaran, Senior Scientific Officer, MNRE
- Ms. Meenakshi, Accounts Officer, MNRE



The principal Investigator, Dr.V.Rajini, Professor presented the progress of the project and the committee recommended the release of second instalment of the Fund.

Dr. S. Radha (Prof. & Head/ECE), Dr. R. Amutha (Prof. /ECE), Dr. R. Ramaprabha (Asso.Prof./EEE), Dr. R. Kishore (Asso. Prof./ECE), Dr. B. S. Sreeja (Asso. Prof. /ECE) and Ms. R. Hemalatha (AP/ECE) submitted a project proposal worth of 70 Lakhs to DST under CER 2015.

Ms. K.V.Iswarya, Student of ME(PED) won the 1st Prize in "Danfoss- Innovator Project Award 2014-15" conducted by Danfoss Industries Pvt. Ltd. She has won a cash prize of Two Lakhs rupees and Pin of Excellence for her project entitled, "Velocity Control of Linear Switched Reluctance Motor" under the guidance of Dr. M.Balaji, Associate Professor, Department of EEE.

7 student batches - Ms. M. Nivetha (II. M. E. PED), Ms. T. Divya (II. M. E. PED), Ms. M. S. Anandhi (II. M. E. PED), IV Year B. E. EEE batch consists of Ms. S. Harini, Ms. K. Nanditha, Mr. S. R. Gautam& Mr. A. Chandra Ganesan, III year B.E. EEE batch consists of Ms. R. Supriya& Ms. V. Aishwhariya, , II Year B.E. EEE batch consists of Ms. N. Raja Nandhini, Ms. G. Priyadharshini& Ms. S. Shunmugapriya, II year B.E. EEE batch consists of Mr. B. V. Arjun& Mr. P. Arjun submitted their project proposals for SSN Student project internal funding on 13.08.2015 under the guidance of Dr. R. Ramaprabha (Assoc. Prof.).

Dr.M.Balaji, Associate Professor, EEE Received order copy of DST Project titled "Design and Development of Hybrid Switched Reluctance Motor Drive". The total sanctioned amount for the project is Rs. 22,90,000/-.

Student's projects for internal funding under the guidance of Dr.R.Seyezhai was submitted at SSNCE.

Sakina.M.Mota and Sanjeev Mohan (Final Year UG Students) under the guidance of Dr.M.Balaji presented their project "A Method to Mitigate Accidents by Detection of Sleepiness in Drivers Using Electroencephalograph (EEG) Signals" for student internal funding.

M.Ashwin Karthic and P. Meshach Daniel (Third Year UG Students) under the guidance of Dr.M.Balaji presented their project "Auto Car-Solution For Parking and Safe Journey" for student internal funding.

Research Progress

Ms. R.Jeyapradha, alumnus of M.E (PED) joined as full time research scholar for doing Ph.D under supervision of Dr. V.Rajini

Dr. Ranganath Muthu, Prof/EEE conducted Ph.D. Viva-voce Examination for research scholar Nirmala S A

Dr. R. Ramaprabha (Assoc. Prof/EEE) has presented her research activities and roadmap on 07.07.2015 at SSN Research center in the presence of Dr. Barua.

Dr.R.Seyezhai, ASSP/EEE presented her research activities in the Energy Researchers meet held at SSNRC.

Ms. Antojailyn, Ms. T.Brindha, passed out M.E students joined as Research assistants under supervision of Dr. V.Rajini

Dr Ranganath Muthu, Prof/EEE conducted the Ph.D. Viva-voce Examination for Mr. Kailaspathi at Annamalai University as Indian Examiner

Mr. S. Iyappan, passed out M.E student joined as SSN Research Assistant (SRA) under the supervision of Dr. R. Ramaprabha, Assoc. Prof.

Dr. Ranganath Muthu & K. Murugesan - Submitted the RSoP Project Proposal titled "Design of Back-to-Back Converter to Mitigate the Unbalances in Grid Connected DFIG Wind System" to CPRI Bangalore.

Dr. R. Ramaprabha (Assoc. Prof.) has presented her research activities and roadmap on 12.08.2015 at SSN Research center in the presence of Dr. Barua.

Dr.R.Seyezhai, ASSP/EEE presented her research activities in the Energy Researchers Meet held at SSNRC headed by Dr.Barua.

R.AmalaNiruba, II Year M.E. (PED) under the guidance of Dr.R.Seyezhai, ASSP/EEE submitted a project proposal to Tamilnadu State council for science and technology for dote campus, Chennai.

Dr. R. Ramaprabha (Assoc. Prof.) and Ms. S. Malathy (AP) have completed the installation of 1kW PV array under internal funding on 28.08.2015. The power generated by the array is ready for possible lighting of corridor lights.

Thesis report of Mr.P.Ganesan, AP, Sathyabama university, Ph.D scholar of Dr.V.Rajini was received. Both the examiners have recommended the thesis as Highly commended

Dr.R.Seyezhai, ASSP/EEE presented her research activities in the Energy researcher's meeting held at SSNRC headed by Dr.Baruo.

Dr. R. Ramaprabha (Assoc. Prof.) has presented her research activities and roadmap on 08.09.2015 at SSN Research center in the presence of Dr. Barua.

Ph.D Viva Voce examination for P.Ganesan, research scholar of Dr.V.Rajini at Sathyabama university was conducted. Dr.N.Sivakumaran, HOD/instrumentation Div, NIIT, Trichy and Sr.K.Selvakumar, Professor/CSE, Annamalai University were the examiners.

Ms. G. Ramya (FT Research scholar) of Dr. R. Ramaprabha (Assoc. Prof.) applied project proposal for DST under SYST on 29.09.2015.

Accolades

Dr. R. Ramaprabha (Assoc. Prof. /EEE) was nominated as a Technical chair for an International Conference on Power and Energy Systems: Towards Sustainable Energy PESTSE-2016 conducted by Amrita School of Engineering, Amrita Vishwa Vidyapeetham University, Bangalore which will be held in Jan 2016.

Dr Muthuselvan M B ASSP/EEE Reviewed a book titled, "Power Transmission and Distribution", from McGraw Hill Education (India)

Mohamed Ayubkhan A, Narenraju N, Kapildev Kumar A, P Preeti of II year - A section students won "Budding Innovator award" in the event "DISPRO-PROJECT DISPLAY" in "CORONA 2015", an intra-college technical fest, organized by the Department of ECE, SSN College of Engineering.

Dr. V.Rajini was Panel member for interview of M.E PED admissions

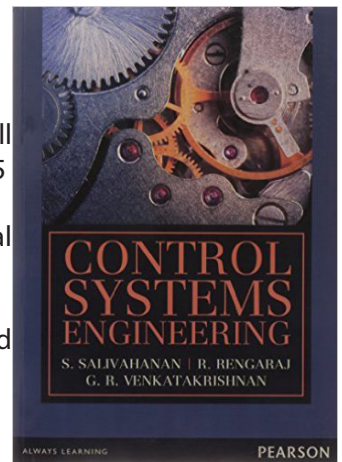
Dr.R.Seyezhai, ASSP/EEE has been nominated as editorial board member for the Journal of Electrical Engineering and Science, DJ Publication.

Dr.V.Rajini received the Best teacher award in the teachers day function

Dr.V.Rajini was invited to give her suggestions on the government's draft policy on small wind energy systems by MNRE. She has submitted her feed back to MNRE on 15-9-2015

Dr.R.Seyezhai ASSP/EEE has been nominated as editorial board member for the Journal of Electrical Engineering and Science.

Dr. S. Salivahanan, Dr. R. Rengaraj and G. R. Venkatakrishnan have published a book titled "Control Systems Engineering" by Pearson Education.



Guest Lectures

Dr Muthuselvan M B, ASSP/EEE delivered a guest lecture on "Load Frequency Control" at Velammal Institute of Technology

Dr. R. Ramaprabha, Assoc. Prof./EEE and Ms. S. Malathy (AP/EEE) arranged a guest lecture on "Soft Switched Converters" for the benefit of UG & PG students of EEE under the banner of SSN IEEE Student Branch on 23.07.2015 from 10.30 am to 12.30 pm. The resource person is Dr. M. Prabhakar, Associate Professor, SELECT-VIT, Chennai campus.

Dr Ranganath Muththu, Prof/EEE delivered lectures on "State Variable Analysis" and "Stability Analysis" at the FDP on "Control Systems" at Sree Sastha Institute of Engineering & Technology

Dr.R.Seyezhai, ASSP/EEE delivered the lecture on,"PSIM for Power Electronics" and handled the tutorials on PSIM simulation for Power Converters in the National Workshop on Simulation Softwares for Power Electronics held at SSNCE.

Dr. R. Ramaprabha, Assoc. Prof. delivered a guest lecture on "Power Converters for Solar Photovoltaic Systems" on 10th August 2015 at Saveetha School of Engineering, Chennai.

Dr.M.Balaji, Associate Professor, EEE delivered a guest lecture on "Switched Reluctance Motor and its controllers" at NITTR, Taramani, Chennai.

Dr.U.Shajith Ali, Associate Professor, delivered a guest lecture on "Power Electronics - Pulse Width Modulated Inverters" at Thangavelu Engineering College, Chennai.

Dr.R.Seyezhai, ASSP/EEE addressed the inaugural function in the National seminar & workshop on, "Structured Approach of Methods and Techniques Behind Research Methodology- Engineering and Management Studies" and delivered a special Lecture on, "Research Proposal writing & Funding Agencies" at Jeppiaar Engineering College, Chennai.

Reviews

Dr.V.Rajini reviewed a paper for IET Renewable power Generation

Dr. Ashwin Kumar Sahoo, has reviewed a research paper for "International Journal of Power and Energy Conversion (IJPEC)". <http://www.inderscience.com/ijpec>

Dr. R. Ramaprabha (Assoc. Prof.) reviewed papers for an International journal on IET Renewable Power Generation, an International journal on International Journal of Power Electronics (IJELEEC), Inderscience publishers.

Dr. Ashwin Kumar Sahoo, has reviewed a research paper for "International Journal of Advances in Electrical and Electronic Engineering(AEEE)". <http://advances.utc.sk/index.php/AEEE>

Dr. R. Ramaprabha (Assoc. Prof.) act as a reviewer for the 2015 Conference on "Power, Control, Communication and Computational Technologies for Sustainable Growth" which will take place at G. Pulla Reddy Engineering College (Autonomous), Kurnool, Andhra Pradesh, India during 11-12 December, 2015.

Dr. R. Ramaprabha (Assoc. Prof.) reviewed a paper for Journal on Simulation Modelling Practice and Theory by Elsevier publications & IEEE Transactions on Power Electronics.

Dr. R. Ramaprabha (Assoc. Prof.) reviewed a paper for an International journal on IET Renewable Power Generation.

Dr.V.Rajini conducted the first project review for the M.E PED students.

Dr. N. Pandiarajan reviewed 4 research papers in the Elsevier publications journal, "Renewable Energy."

Meetings

Dr. V.Rajini convened the first DC meeting of Ms. R.Jeyapradha, Full time research scholar doing Ph.D under her supervision.

Dr. V.Rajini attended the confirmation meeting of Ms. Ramya, Research scholar of Dr. R.Ramaprabha

Dr. R. Ramaprabha, Asso.Prof. conducted confirmation meeting for the part-time PhD scholar for V. Ramya at 02.00 p.m. at Department of EEE, SSNCE on 03.07.2015.

Dr. R. Ramaprabha (Asso.Prof.) attended a DC meeting at Department of EEE, SSNCE on 03.07.2015.

Dr. R.Seyezhai, ASSP/EEE conducted the DC Confirmation meeting for the research scholar Mr.Rasan at SSNCE.

The first class committee meeting of fifth semester EEE class for the academic year 2015-16 was conducted on Thursday July 16, 2015 at Seminar Hall, EEE Department at 2.30 pm by Class Committee Chairperson Dr. N.Pandiarajan.

Dr. R. Ramaprabha (Assoc. Prof.), SSN-IEEE Student Branch Counselor, Mr. Gadepalli Sai Krishna Dileep (IEEE-Student Chair) and Ms. Ranjini (IEEE-Joint secretary) attended IEEE student Branch Officers meeting at Anna University, Chennai on 22.08.2015 and presented the branch activities.

Dr.V.Rajini attended DC meeting at VIT Chennai

Dr.R.Seyezhai, ASSP/EEE attended the IEEE WIE International Leadership Summit 2015 at Hotel Green park, Chennai.

Dr. R. Ramaprabha (Assoc. Prof.), SSN-IEEE Student Branch Counselor, Mr. Gadepalli Sai Krishna Dileep (IEEE-Student Chair) and Mr. S. B. Vishal (Secretary, EMBS student chapter) conducted IEEE general meeting/technical discussions.

Others

Mr Pandiakumar M has been promoted to Assistant Professor Grade III. We congratulate him.

Dr.R.Seyezhai, ASSP/EEE visited ECIL campus at Hyderabad.

Programme monitoring committee from MNRE- Delhi & NIWE (CWET)- Chennai visited Dr.V.Rajini's lab for monitoring the progress of the MNRE sponsored project

Dr. R. Ramaprabha (Assoc. Prof.) was one of the judges for the Event "Paper Presentation" in Eupraxia 2015 – Student's symposium of EEE department held on 29.08.2015

Dr.V.Rajini submitted the statement of accounts and utilization of the second quarter for the sponsored project to MNRE

Ms.K.V.Iswarya, Student of ME(PED) of EEE department won the 1st Prize in "Danfoss- Innovator Project Award 2014-15" conducted by Danfoss Industries Pvt. Ltd. She has won a cash prize of Two Lakhs rupees and Pin of Excellence for her project entitled, "Velocity Control of Linear Switched Reluctance Motor" Under the guidance of Dr.M.Balaji, Associate Professor, Department of EEE.



Events Organized

Department of EEE Organized a Workshop on "Learn 1000 words in 6 hours" on July 14, 2015 under the banner of IEEE student branch.

Conveners: Dr. R. Ramaprabha

Student Coordinators: Mr. Gadapelli Sai Krishna Dillep and Ms. Sakina M Mota

Number of Participants: 380 (from various departments)

Speaker: Mr. Santhosh Karnananda, Founder & Director, MyGmat, MyGre and MeraEnglish.com

The workshop 'Learn 1000 Words in 6 Hours' was a unique workshop and has been conceived after years of academic and psychological research. The speaker just didn't teach words, but narrated stories from various sources like the history, medicine, mythology and arts to make sure that we never forget what we learn. It was a very interactive workshop and the speaker gave the audience some inputs on how to go about their carrier. The response was overwhelming.



Department of EEE Organized Two days National Workshop on "Simulation Software for Power Electronics" during July 31-August 01, 2015 under the banner of SSN-IEEE student branch and IEEE Power Electronics Society, Madras Section. 38 members including UG, PG students & PhD scholars participated in this workshop and get benefitted with hands-on practice. The details are,

Conveners: Dr. V. Kamaraj, Dr. R. Seyezhai, Dr. R. Ramaprabha, Dr. M. Balaji and Ms. S. Malathy

Number of Participants: 38

Sessions & Speaker:

- Session I: Introduction and Tutorials on PSpice by Dr. R. Ramaprabha
- Session II: Introduction and Tutorials on PSIM by Dr. R. Seyezhai
- Session III: Introduction and Tutorials on MagNet by Dr. M. Balaji
- Session IV: Introduction and Tutorials on MatLab by Ms. S. Malathy

In all the sessions, the hands-on training have been given for the simulation of power electronic converter circuits with different software. The participants have been benefitted to proceed their project/research works.



EUPRAXIA 2015

-John Nishore M, IV year, EEE-A

INAUGURAL FUNCTION

The inaugural function started by 8:45 AM. The registrations were started and were ongoing till the arrival of the Chief Guest, Mr. Viswanath Kruthiventi.

He is the Regional head of Siemens. Also Principal, EEE HOD, staff coordinator and other department staffs along with the department students and all other students from various colleges attended the symposium. The lighting of the Kuthuvilakku and a prayer song marked the starting of the event. President of AEEE delivered the welcome address with a speech about the symposium. It was followed by an enlightening presentation on Energy resources by Mr. Viswanath Kruthiventi.

Our logo which was a full LED display was launched after which a short film was played for the audience. Before the end of the inaugural function, AEEE magazine named "CYNOSURE" was released and given to the dignitaries.

The inaugural ended with vote of thanks given by the Vice President, AEEE.



REGISTRATIONS

Registrations for the event were done outside the main auditorium till the inaugural. They were taken up outside the department after the inaugural and was closed by 11'0 clock. A total of almost 7,500 students came to participate in the symposium. Registrations for the various workshops were done separately at their venues.



WORKSHOPS

MATLAB

Basics of the software were taught by a fourth year student along with a team of third years. It was conducted in a single session from 12 to 2:30 P.M in the main auditorium and was a huge success.

We received a very positive feedback from the students who attended the workshop, who stated that they learnt and understood the basics well. Materials were also circulated for later reference.



IMAGE PROCESSING

A session on Image Processing workshop was conducted by a M.S. Research Scholar from IIT-M. It was held from 11 A.M to 1:30 P.M in the Chemical Department Seminar hall. Various feature extraction techniques and Transforms were explained.

INTERNET OF THINGS

There were two sessions conducted for this workshop by a fourth year student in the mini auditorium with each session being attended by over 350 students. First session started from 10:45 A.M to 1 P.M and the next session was from 1:30 P.M to 3:45 P.M. This workshop was sponsored by Intel and their Galileo kits were used for hands on practice.



TECHNICAL EVENTS

The various technical events that were conducted are

1. Paper Presentation
2. Project Display
3. Bomb Squad
4. Electronic Maze
5. Robotics
6. #Code
7. Tech Quiz
8. Circuit Map
9. Arduino Challenge
10. Online Simulation

NON TECHNICAL EVENTS

The various technical events that were conducted are

1. Treasure Hunt
2. Dumb C
3. Sherlock Holmes
4. How Stuff Works
5. Brain Teasers
6. IPL Bidding
7. Online Photography

We are happy to share the news of Grand success of Eupraxia-2k15 with number of participants exceeding 7,000 students. We are thankful to all the students and faculty of EEE department for co coordinating with each other and helping us in making the event a grand success. We are proud of ourselves for taking Eupraxia to the next level and hope that it will reach greater heights in the future.

Eupraxia - at a glance



Chief Guest: **Shri. Vishwanath Kruthiventi**, Regional Head, Sales, Siemens India(P) Ltd. Chennai



1. MatLab workshop – attended by 900 participants. (Justice Pradhap Singh Auditorium)
2. Internet of Things workshop - attended by 700 participants. (Mini Auditorium)
3. Image Processing workshop - attended by 150 participants. (Seminar Hall)

The Valedictory Function was presided over and the prizes worth of Rs 1,00,000 were distributed to the winners and runners of the events by Shri. Nagoor Kani, reputed author of EEE textbooks.



STUDENT ARTICLES

Internship Experience

-Vignesh Muralidharan, IV year, EEE-B

My internship at Canada was really an exciting experience. I got selected for the prestigious MITACS Globalink Research Internship at University of Northern British Columbia, Canada. I worked on a robotics project along with four other graduate students at the University.

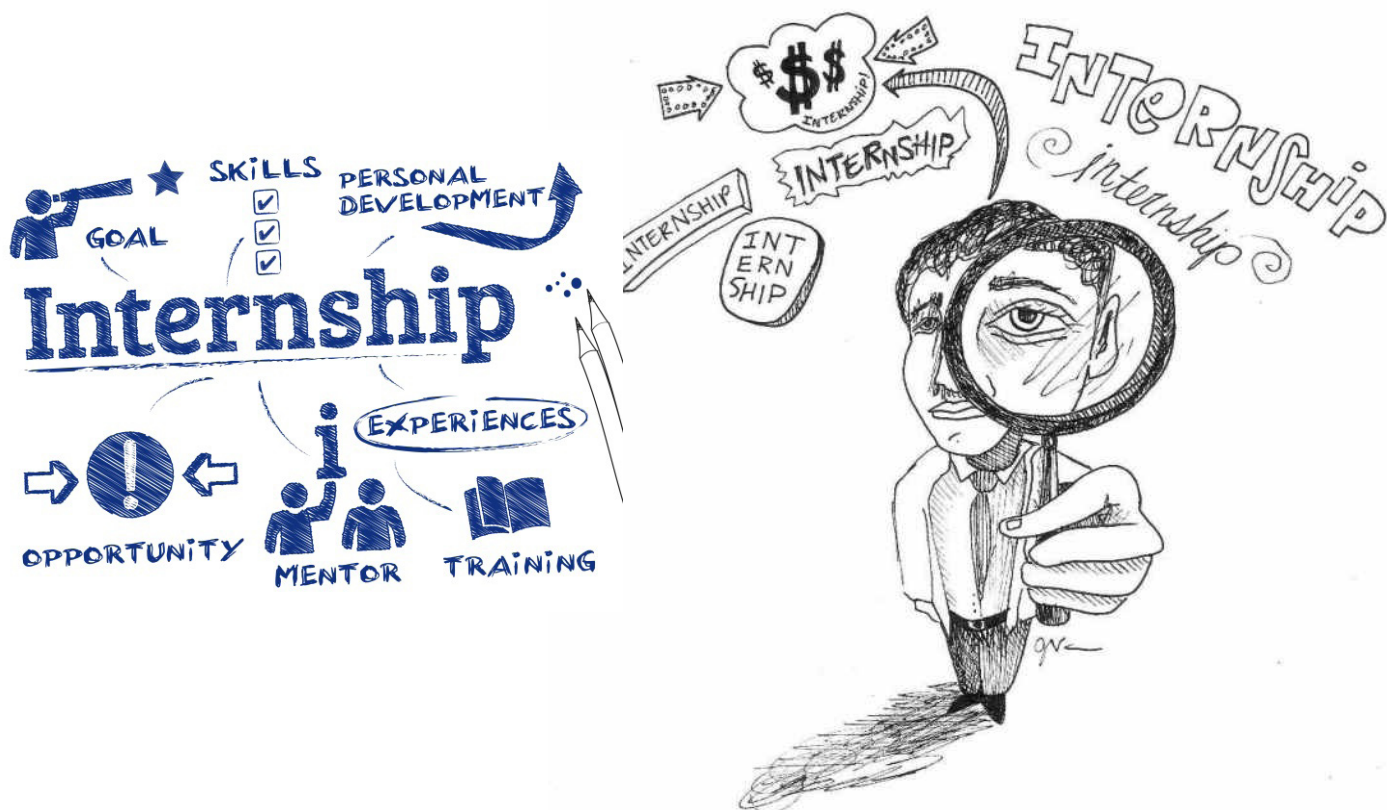
Mitacs Globalink Research Internship is a competitive initiative for international undergraduates from Brazil, China, India, Mexico, Saudi Arabia, Turkey and Vietnam. From May to September of each year, top-ranked applicants participate in this research internship under the supervision of Canadian university faculty members in a variety of academic disciplines, from science, engineering and mathematics to the humanities and social sciences.

You will be required to create a personal user account on the Student Platform at the MITACS Official Website. Do not create two profiles; your application may be processed incorrectly. Once you are logged on, you can begin your application and start applying to research projects. You will be able to save your work and return to it later to add more information and any documents that you need to upload. Applications will be assessed only after the application deadline.

My research work was to ensure position of robots using local knowledge and also facilitate inter-robot communication. Initially, position of all the robots will be known before starting the seed planting process. After the seed planting is initiated, my work was to determine the location of each robot by an efficient, innovative method at any particular instant and make a local node-node communication. This will make sure that all the robots can know its location and the location of other robots so that they can maximize the crop area in a faster way.

Applicants must:

- Be enrolled in full-time undergraduate or combined undergraduate/Master's programs
- Have a minimum of one semester and a maximum of three semesters remaining in their program.
- Meet the grade requirements for their country of study: India: CGPA- 8/10



Placement Season

Company	No. of candidates placed
Accenture	36
Bosch	6
Cognizant Technology Solutions	54
Fidelity Investments	5
Freshdesk	4
Infosys	32
LatentView	1
MuSigma	1
Tata Consultancy Services	21
Tata Elxsi	17
TCS Chief Technology Office	1
Verizon	1
Wipro	34
Zoho Corporation	1

*The above data includes multiple offers for mass recruitment companies



ALUMNI TALK

Masters in United States

-Anirudh Gopal

It is that time of the year students scramble to cope up with the pressure of semester exams combined with GRE/CAT exams. As an Alumni of SSN (2009 BE.EEE), I have experienced the same confusion, frustration & indecision that overwhelms a majority of the students. Our education system is deeply ingrained in practicing rote memory that it fails to particularly impart real world skills. With inadequate practical opportunities & bookish knowledge, many students fail to see the light at the end of the tunnel. This is especially true for a lot of students coming from nearby towns who believe that a basic Engineering degree can hone their skills. In this day and age, a recommendation I can propose is not to stop yourself with a Bachelor's degree, but pursue a Master's degree in the field of your choice.

For many, studying in the United States is beyond the realm of popular interests, largely because of monetary constraints. But overwhelmingly, there has been a rise in the number of students willing to pursue opportunities abroad. Year after year, common exams like CAT & XAT have become even more competitive pushing students to take an easier route to prepare from GMAT/GRE instead. Also, the international exposure studying from these universities is unparalleled. I have to admit that a few years back, I graduated during tough times of recession that made my already indecisive mind be more cautious in education. Without much success preparing from CAT exams, I took up an offer with Cognizant and remained there until July 2012. After about 2.5 years of work experience, I completed my Master's in Engineering Management from a renowned university and currently work at Bank of America as a business analyst. I have to admit that the learning curve has transcended beyond expectations and made me focus on "moving on" rather than "trying harder"

In this particular piece, I want to concentrate on students interested in pursuing a Master's degree from the United States. Although I do agree a single page would sound too unreasonable to comprehensively detail each and every single facet of educational experience, but I would try my best to be terse and exact. For more information, you can reach out to me at anirudhgopal_88@yahoo.co.in. But before I begin, here's some basic information about studying in the United States in general.

Higher education in the United States is an expensive affair. The average cost of tuition could set you back by atleast \$20,000 to \$40,000 for 2 years just in tuition expenses. Surprisingly, some of the most expensive universities are the top ones. One would require GRE/GMAT score coupled with TOEFL to make the cut. Most of the times, the colleges are a multicultural affair. You get to meet interesting folks from various backgrounds, countries & cultures. Many students come to the US to pursue tech related courses in electrical, electronics, power systems, computer science, management information systems courses & so on. MBA courses are typically more expensive going anywhere from \$100,000 to \$150,000 a for the entire courses just in tuition expenses. Students who complete the master's are required to work on a Work Visa (H1-B). However, as a student you have an opportunity to work on the F1 Visa(also known as Student Visa) for a particular period of time before getting a H1B visa. Every student is eligible to work for 12 months after completion of their course. Beyond 12 months however, they have to file for a STEM extension which allows a student to work for upto 29 months in total(17 extra). This is however limited only to Science Tech Engineering & Mathematics majors so those interesting in pursuing MBA/Journalism/Finance/Marketing etc. are sometimes at a disadvantage. Maybe this is one of the reasons students don't prefer doing non-tech courses in the US because finding a company to sponsor you for non-tech jobs are rather difficult to find, and typically H1B jobs are special skilled jobs. Only in the last 3-4 years, the number of petitions for H1b application has surpassed the number of available H1b visas. This year 2015 was a record in terms of total petitions filed (240,000 petitions for 65,000 Visas). Quite honestly, none of these has discouraged students from studying in the US. Also, it should be noted that STEM students have the 29 month OPT period by which most would end up repaying their student loans. Again all the above should not discourage any of you from applying abroad, if that's what you want to do.

Advantages of studying in the US

- Amazing experience, world class infrastructure, interaction with international students

- Flexibility of courses highly educated & trained faculty.
- International work experience
- Merit oriented.
- More focus on collaboration than testing memory skills
- Ability to make more money in a shorter term relatively
- Better for research
- Better return for investment if you find a job. The lowest pay will be atleast \$60,000 and typically highest is around \$120,000.

Disadvantages

- Can be an expensive, requires students to write GRE/GMAT & TOEFL. Even application to universities can set you back by atleast \$2000.
- Can be very taxing because of the heavy competition
- Not a great option if you're looking to settle back to India
- H1-B is based on lottery, so there is always a chance of not getting picked
- Away from family & friends for long. Not easy pocket money.

For students interested to study in the abroad, here's what you should (Assuming you're graduating in 2017).

May 2016 – July 2016: Best time to complete GRE/GMAT exams because it allows multiple retakes

August 2016 to October 2016: Time to short list university, prepare SOPs & Recommendation letters.

October 2016 to Feb 2017: Apply to universities. (Certain universities have a rolling admission without a deadline, so care must be taken to apply as early as possible.

Feb 2017 to May 2017: Time to learn new tech languages, new tools, or complete internal projects within the University.

May 2017 to August 2017. Do an internship. Most students coming to the US have absolutely no background in projects or work experience. In the US, most bachelor students do proper internship during the 2,3 & 4 years. Hence to compete with an international student requires more than just small projects or paper presentation at small colleges. If you can get hold of a big shot, it is advisable to do your internship in a company that is well established and well recognized.

August 2017 to Sept 2017: You are all set for your masters!

One thing to note: What I have mentioned is for students who have absolutely made up their mind for masters in the US. For those who haven't, it's perfectly okay to work for 1-2 years and then decide whether to do MBA or MS. At the end of the day, just because your friends already studied before you and started working, it doesn't indicate that they earn well. A good amount of experience in the field of your interest is the key to success.

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