

SSN COLLEGE OF ENGINEERING

RAJIV GANDHI SALAI (OMR)

KALAVAKKAM-603110, TAMIL NADU

Sponsored Research for the Calendar years 2012, 2013 & 2014

Sr. No.	Year	Title of Project	Funding Agency	Amount In Lakhs
1	2014-2015	A novel fused converter for SPV- wind based hybrid systems to power rural telephony	MNRE	34.00
2	2014-2015	Design and Development of Flywheel based Power Conditioning System for a Renewable energy fed Micro grid	DST – WoS A	17.10
3	2014-2015	Design and Development of Hybrid Switched Reluctance Motor Drive	Science and Engineering Research Board	22.90
4	2014-2015	Stator fault diagnosis and condition monitoring in DFIG system	SSN Trust	4.50
5	2014-2015	Design and development of energy efficient reluctance motor drives	SSN Trust	3.25
6	2014-2015	Fund for Improvement of S&T Infrastructure	DST	223.50
7	2014-2015	Development of Text-to-speech synthesis for Indian languages	MCIT	20.21
8	2014-2015	Study of soft errors in 65nm gate length CMOS SRAM and 30nm gate length FINFET, Tunnel FET and Junction-less FET based SRAM using TCAD Simulation	DRDO	3.00
9	2014-2015	Hardware implementation of SPWM control for Standalone Hybrid Renewable Energy using DSP processor	Linton University College, Malaysia	4.32
10	2014-2015	Energy and Bandwidth efficient pixel processing algorithm for image transmission over Wireless Sensor Networks using compressive sampling	SSN Trust	1.71
11	2014-2015	Fabrication and Characterization of Bi-stable MEMS Switch	SSN Trust	0.00
12	2014-2015	Design of MEMS based vibration energy harvester	SSN Trust	0.14
13	2014-2015	Energy Efficient Image Communication over Wireless Sensor Network	SSN Trust	0.00
14	2014-2015	Data Collection and Characterization of Under Water Ambient Noise at Bay of Bengal (Pondicherry / Cuddalore or Cochin)	SSN Trust	2.50

SSN COLLEGE OF ENGINEERING

RAJIV GANDHI SALAI (OMR)

KALAVAKKAM-603110, TAMIL NADU

Sponsored Research for the Calendar years 2012, 2013 & 2014

15	2014-2015	Development of a low cost programmable communication	SSN Trust	0.22
16	2014-2015	Closed loop surveillance quadcopter	SSN Trust	0.30
17	2014-2015	Information broadcast through bluetooth	SSN Trust	0.20
18	2014-2015	Energy Harvesting using PVDF film	SSN Trust	0.10
19	2014-2015	Traffic Congestion Prediction Module	SSN Trust	0.25
20	2014-2015	Internet controlled power management system	SSN Trust	0.12
21	2014-2015	Optimization of structural design of cantilever	SSN Trust	0.25
22	2014-2015	Design of servo humanoid robot	SSN Trust	0.25
23	2014-2015	Automated parental drug infusion system	SSN Trust	0.20
24	2014-2015	Development of wind speed frequency distribution	SSN Trust	0.20
25	2014-2015	Development of an energy harvesting microbial fuel cell system	SSN Trust	0.25
26	2014-2015	A hybrid flexi-mode pricing scheme for smart grid	SSN Trust	0.30
27	2014-2015	Automatic Skyscraper Cleaning System	SSN Trust	0.20
28	2014-2015	Multi objective optimization techniques to improve the automation of test data generation in SBST	SSN TRUST	1.80
29	2014-2015	Software Controlled Appliances for Energy Conservation and Differently Abled People	SSN TRUST	0.25
30	2014-2015	Performance Enhancement of CPU Intensive Applications Running on Raspberry Pi	SSN TRUST	0.15
31	2014-2015	Real Time Image Processing Applications on Low Cost Embedded System	SSN TRUST	0.10
32	2014-2015	Automated Self Balancing Bicycle with Obstacle Avoidance	SSN TRUST	0.25
33	2014-2015	Brain Visual State Classification System using fMRI data analysis	SSN TRUST	0.13
34	2014-2015	Speech based Integrated Development Environment (IDE) for compiling C, C++ and Java Program	SSN TRUST	0.10

SSN COLLEGE OF ENGINEERING

RAJIV GANDHI SALAI (OMR)

KALAVAKKAM-603110, TAMIL NADU

Sponsored Research for the Calendar years 2012, 2013 & 2014

35	2014-2015	An Intelligent Robotic Hand – Arm System	SSN TRUST	0.25
36	2014-2015	An Integrated Augmented Reality System with Human Motion Tracking and Analysis	SSN TRUST	0.25
37	2014-2015	Development of TEXT to SPEECH SYSTEM in Indian Languages - High quality text to speech synthesis and small footprint TTS integrated with disability aids	DIT, MCIT	20.21
38	2014-2015	Study of Soft Errors in 65 nm Gate Length CMOS SRAM and 30 nm Gate Length FinFET, TunnelFET and Junction-less FET-based SRAMs Using TCAD Simulation	DRDO	3.19
39	2014-2015	Development of high resolution imaging algorithm for underwater acoustic images	SSN	3.00
40	2014-2015	Joint link prediction by attribute inference in clandestine social network for curbing future attacks	SSN	3.50
41	2014-2015	Big data Analytics for economic disparity mining	SSN	2.30
42	2014-2015	Being Smarter with Smart Objects	SSN	3.50
43	2014-2015	Ocimum sanctum extract coating on biomaterial surfaces	SSN Trust	2.50
44	2014-2015	Handle design to overcome vibration discomfort and performance through experimental analysis	DST - Swarnajayanthi fellowship Scheme	18.89
45	2014-2015	Design and Fabrication Lab for Experiential Learning	AICTE-MODROBS	5.94
46	2014-2015	Study of Mechanical Properties & Surface Features of Steels Quenched in CNT Nanofluids	AICTE - RPS	9.50
47	2014-2015	Use of Alternative Cementitious Materials in Geopolymer Concrete	SSN Trust	5.50
48	2014-2015	Study of SCC using Alternative Cementitious Materials	SSN Trust	2.25
49	2014-2015	"MARKOV APPROACH FOR RELIABILITY ASSESSMENT OF SAFETY CRITICAL SOFTWARE"	ATOMIC ENERGY REGULATORY BOARD(AERB)	1.37
50	2014-2015	RELIABILITY OF FUZZY HIDDEN MARKOV MODEL & INTUITIONISTIC FUZZY MARKOV MODEL	SCIENCE AND ENGINEERING RESEARCH	4.00

SSN COLLEGE OF ENGINEERING

RAJIV GANDHI SALAI (OMR)

KALAVAKKAM-603110, TAMIL NADU

Sponsored Research for the Calendar years 2012, 2013 & 2014

			BOARD (SERB)	
51	2014-2015	Development and characterization of PMN-PT single crystals for under water applications".	DST--SERB	35.5
52	2014-2015	Investigations on Crystal growth and characterization of Multiferroic single crystals	UGC-DAE	6.51
53	2014-2015	Nano Catalyst Embedded HeirarchiallyPorous	DST	22.85
54	2014-2015	Investigation of Thermally Stable PolyanionElectrodesfor Li-ion Batteries	NRB	18.45
55	2014-2015	Visible light active metal and non metal doped mesoporous TiO2	DST	2.00
56	2014-2015	Funded Student Projects -100 Nos	SSN Trust	20.27
57	2013-2014	Modernization of High Voltage lab as a unified power Lab	AICTE	19.54
58	2013-2014	Design and development of efficient Building integrated PV system under partial shaded conditions	SSNCE	3.50
59	2013-2014	Solar Electric Vehicle using BLDC Drive	SSN Trust	4.50
60	2013-2014	Development of Text-to-speech synthesis for Indian languages	MCIT	21.13
61	2013-2014	Study of soft errors in 65nm gate length CMOS SRAM and 30nm gate length FINFET, Tunnel FET and Junction-less FET based SRAM using TCAD Simulation	DRDO	1.97
62	2013-2014	Intel Embedded Curriculum Initiative in India	INTEL	2.50
63	2013-2014	Design and Development of Polymer Composite based reflect array for space applications	SSN Trust	6.45
64	2013-2014	Ergonomics through Image Processing	SSN Trust	0.49
65	2013-2014	Development of Successive Approximation Analog to Digital Converter (SAR ADC) for Ultra Wide Band (UWB)	SSN Trust	7.29

SSN COLLEGE OF ENGINEERING

RAJIV GANDHI SALAI (OMR)

KALAVAKKAM-603110, TAMIL NADU

Sponsored Research for the Calendar years 2012, 2013 & 2014

66	2013-2014	Energy and Bandwidth efficient pixel processing algorithm for image transmission over Wireless Sensor Networks using compressive sampling	SSN Trust	1.02
67	2013-2014	Development of Underwater Acoustic Communication Research Lab	SSN Trust	7.00
68	2013-2014	Automation of green house and its remote access	SSN Trust	0.35
69	2013-2014	MEMS based design of Energy Harvesters for Wireless Sensor Nodes	SSN Trust	0.25
70	2013-2014	Performance measurement and comparison of microstrip bandpass filter topologies for wireless applications	SSN Trust	0.20
71	2013-2014	Design, Analysis and Implementation of Microwave Power Amplifier for Biomedical Devices	SSN Trust	0.20
72	2013-2014	An extended robotic arm for defense and rescue applications	SSN Trust	0.25
73	2013-2014	Improving Map Reduce Performance in Hadoop	SSN TRUST	0.25
74	2013-2014	Virtual World Simulator	SSN TRUST	0.20
75	2013-2014	An Innovative Approach for Building an Intelligent Network to Maintain Water Quality	CHELLAMAL AGRO	0.25
76	2013-2014	Development of TEXT to SPEECH SYSTEM in Indian Languages - High quality text to speech synthesis and small footprint TTS integrated with disability aids	DIT, MCIT	21.13
77	2013-2014	Study of Soft Errors in 65 nm Gate Length CMOS SRAM and 30 nm Gate Length FinFET, TunnelFET and Junction-less FET-based SRAMs Using TCAD Simulation	DRDO	2.78
78	2013-2014	Nano-particle based strategies to combat orthopedic implant asso. Infections	SSN Trust	6.00
79	2013-2014	Magnetic moulding of A/SiCp of metal matrix composites	DST	9.26
80	2013-2014	Industry Institute Partnership Cell	AICTE under IIPC	11.00
81	2013-2014	Visible light active metal and non metal doped mesoporous TiO ₂	DST	3.00
82	2013-	Funded Students Projects- 50 Nos	SSN Trust	

SSN COLLEGE OF ENGINEERING

RAJIV GANDHI SALAI (OMR)

KALAVAKKAM-603110, TAMIL NADU

Sponsored Research for the Calendar years 2012, 2013 & 2014

	2014			11.03
83	2012-2013	Development of Cascaded Z-source Multilevel Inverter for Photovoltaic Applications	AICTE	24.50
84	2012-2013	Development of Text-to-speech synthesis for Indian languages	MCIT	35.26
85	2012-2013	Study of soft errors in 65nm gate length CMOS SRAM and 30nm gate length FINFET, Tunnel FET and Junction-less FET based SRAM using TCAD Simulation	DRDO	0.00
86	2012-2013	Intel Embedded Curriculum Initiative in India	INTEL	1.50
87	2012-2013	Energy and Bandwidth efficient pixel processing algorithm for image transmission over Wireless Sensor Networks using compressive sampling	SSN Trust	1.81
88	2012-2013	Development of Successive Approximation Analog to Digital Converter (SAR ADC) for Ultra Wide Band (UWB)	SSN Trust	7.29
89	2012-2013	Development of Super-Resolution Algorithms	SSN Trust	1.25
90	2012-2013	Novel SOA Transaction Frameworks for e-Governance Applications	SSN TRUST	9.75
91	2012-2013	Hand gesture based intelligent wheelchair for physically challenged	SSN TRUST	0.25
92	2012-2013	Ergonomics through image processing	SSN	0.60
93	2012-2013	Development of TEXT to SPEECH SYSTEM in Indian Languages - High quality text to speech synthesis and small footprint TTS integrated with disability aids	DIT, MCIT	35.26
94	2012-2013	Study of Soft Errors in 65 nm Gate Length CMOS SRAM and 30 nm Gate Length FinFET, TunnelFET and Junction-less FET-based SRAMs Using TCAD Simulation	DRDO	24.50
95	2012-2013	An assessment and intelligibility modification system for dysarthric speakers	AICTE	9.00
96	2012-2013	Process variational study and performance analysis of nano-scale MOSFETs and FINFETs	DST	21.80

SSN COLLEGE OF ENGINEERING**RAJIV GANDHI SALAI (OMR)****KALAVAKKAM-603110, TAMIL NADU****Sponsored Research for the Calendar years 2012, 2013 & 2014**

97	2012-2013	Experimental and finite element investigation of the machining process with composite materials	AICTE (under RPS)	18.65
98	2012-2013	"MARKOV APPROACH FOR RELIABILITY ASSESSMENT OF SAFETY CRITICAL SOFTWARE"	ATOMIC ENERGY REGULATORY BOARD(AERB)	4.05
99	2012-2013	Development of High Quality Direction Controlled Lithium Iodate and Lithium Sulphate Single Crystals for Nonlinear Optical applications	DAE-BRNS	24.3
100	2012-2013	Crystal Growth of Alkaline Earth halide and cesium based Alkaline Earth halide scintillator crystals for Gamma Ray Spectroscopy	DAE-BRNS	24.82
101	2012-2013	Funded student projects - 28 Nos	SSN Trust	5.83
102	2012-2013	Visible light active metal and non metal doped mesoporous TiO ₂	DST	17.00