

Faculty Profile



Mr. F. Max Savio, M.E., (Ph.D.)
Assistant Professor (O.G.) – EEE

HIGHLIGHTS:

- Number of Journal Publications: 11
- h-Index: 2
- Patents Published: 4
- Patents Granted: 1

PROFESSIONAL LINKS:

- Scopus ID: 56993535700
- Scopus Link: [56993535700](#)
- Google Scholar ID: [F MAX SAVIO - Google Scholar](#)
- Anna University Faculty ID: 6218134
- AICTE Faculty ID: 1-4643353234
- ResearchGate: [Max-Savio](#)
- Web of Science ID: [GNH-2301-2022](#)
- LinkedIn: [maxsaviofrancis](#)
- GitHub ID: [fmaxsavio](#)

PROFESSIONAL BACKGROUND:

- Teaching Experience (till date): 11 years and 6 months
- Industrial Experience: 3 years

AREA OF SPECIALIZATION:

- Power Electronics
- Advance Optimization Techniques

SOFTWARE EXPOSURE:

- MATLAB 2024

- PLECS 4.7.3
- Autodesk Fusion 360
- CATIA V5R21
- JavaScript

JOURNAL PUBLICATIONS:

- Design of a Solar-Wind Hybrid Renewable Energy System for Power Quality Enhancement- A case study of 2.5 MW Real time Domestic Grid – *Accepted in Engineering Reports*
- Naveen Kumar Elangovan, Raju Kannadasan, Max F. Savio, S. Vinson Joshua, Muhammad Faheem, “The influence of methylammonium iodide concentration on the properties of perovskite solar cells” Energy Sciences & Engineering, (2024) No. 12, pp.2004-2016 (DOI: [10.1002/ese3.1724](https://doi.org/10.1002/ese3.1724)) [**SJR: 0.77; SNIP:0.922; Q2; Sci/WoS**]
- Lakshmana Perumal Pattathurani, Subhransu S. Dash, Rajat K. Dwibedi, Mani Devesh Raj, Raju Kannadasan, MaxF. Savio, Mohammed H. Alsharif and James Hyungkwan Kim, “Harmonics Minimisation in Non-Linear Grid System Using an Intelligent Hysteresis Current Controller Operated from a Solar Powered ZETA Converter”, Sustainability, (2022) Vol 14, 2022, pp.1-14 (DOI: [10.3390/su14127028](https://doi.org/10.3390/su14127028)) [**SJR: 3.3; SNIP: 1.086; Q1; Sci/WoS**]
- F. Max Savio, C. Rajesh Kumar, Design of Indirect Matrix Converter for Single Input-Dual Output Applications”, (2018) International Journal of Management, Technology and Engineering, Vol.8, No.12, pp.3810 – 3817 ([Download](#))
- Max Savio, “Speed Control of DC Drive using SEPIC Converter in Solar Power Application using Closed Loop Fuzzy Logic Controller (FLC)”, American Journal of Electrical and Electronic Engineering, (2016) Vol. 4, No. 3, pp.75-80 (DOI: [10.12691/ajeee-4-3-1](https://doi.org/10.12691/ajeee-4-3-1))
- Max Savio, “Mathematical Modelling of SEPIC Converter with Continuous Conduction Mode (CCM) for Solar Maximum Power Tracking Application”, Asian Journal of Current Engineering & Maths, (2015), Vol4, No.6, pp.78-82 ([Download](#))
- Max Savio, “Performance Investigation of Improved High Step-up MPPT using Fuzzy Logic Controller for BLDC Motor Drives”, IOSR Journal of Electrical and Electronics Engineering, (2015) Vol.10, No.5, pp.101.108. ([Download](#))
- Max Savio, Sasikumar Murugesan, “A high efficient fuzzy logic controlled maximum power point tracking (FLMPPT) in solar PV for brushless DC motor drives”, ARPN Journal of Engineering and Applied Sciences, (2015), Vol. 10, No.4, pp.1756-1761. ([Download](#))
- Max Savio, “A Predictive Solution to Unbalanced-Voltage Problem in Wind Turbine Using Four-leg Indirect Matrix Converter”, International Journal for Research in Applied Science & Engineering Technology, (2015) Vol.3, No.3, pp. 190-195. ([Download](#))

- F. Max Savio, “A Low Harmonic Drive System using ZSI for a Variable Speed Wind Turbine”, *International Journal of Engineering Trends and Technology*, (2014) Vol.17, no.7, pp.315-320 ([Download](#))
- Max Savio and Sasikumar Murugesan, “Harmonic Evaluation of Z-Source PWM Inverter for Wind Powered Industrial Drive Applications”, *International Journal of Electrical Engineering and Informatics*, (2014) Vol. 6, No. 1, pp. 129 – 143 (DOI: [10.15676/ijeii.2014.6.1.9](#)) [SJR: 0.28; SNIP: 0.502; Q3; Scopus]
- Max Savio, Sasikumar Murugesan, “A Supervisory Predictive Control using Indirect Matrix Converter for a Variable Speed Wind Energy Conversion System”, *International Refereed Journal of Engineering and Science*, (2013) Vol.2, No.10, pp. 30-47 ([Download](#))
- Max Savio, Hemantha Kumar, Sasikumar Murugesan, “Power Optimisation and Performance Evolution of High Step-Up Solar PV System for DC Drives”, *International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering*. (2013), Vol.2, No.10 ([Download](#))
- Sasikumar Murugesan, Max Savio, “Space Vector Control Scheme of Three Level ZSI Applied to Wind Energy Systems”, *International Journal of Engineering, Transactions: C*, (2012) Vol.25, No.4, pp.275-282 [SJR: 0.35; Q3; Scopus] ([Download](#))
- S. Sellakumar, M. Vijayakumar, F. Max Savio, “The Improvement of Power Factor In A Distribution System Using Hybrid Shunt Active Filter”, *Wulfenia* (2013), Vol.20, No.3 ([Download](#))
- Max Savio, Vasantharaj, Sasikumar Murugesan, “A SVM Control Scheme for Impedance Source Inverter-Based Wind Driven SEIG Fed Motor Drives”, *Journal of Electrical Engineering*, (2012) Vol.12, No.2, pp.142-149 ([Download](#))
- Max Savio, Vasantharaj, Sasikumar, “Implementation of Stand-Alone Hybrid System using SVPWM for Impedance Source Inverter”, *Wulfenia* (2012), Vol.19, No.11 ([Download](#))

CONFERENCE PROCEEDINGS:

- F. Max Savio, A K Chandru, “A Novel Fast-Charging Approach and an Adaptive Control of Drives in Electric Vehicle Applications”, *Springer Conference Proceedings on Emerging Trends in Expert Applications and Security*, pp. 145-156.
- F. Max Savio, “An Improved Interleaved Phase Shift-Semi-Bridgeless Boost Converter fed Electric Charging Adapter”, *Proceedings of IEEE International Conference on Nanoelectronics, Nanomaterials, Nano bioscience & Nanotechnology*.
- Max Savio, “A Fast-Charging Electric Vehicle Adapter (EVA) using Type-I Zeta Converter for LiFePO₄”, *Proceedings of 7th International Conference on Science, Technology, Engineering and Management*.
- Sumabindu, M.L., Max Savio, F., Sasikumar, M., “Design and modelling of a solar interfaced high voltage gain intelligent controller coupled inductor switched capacitor

(CICS) dc/dc converter for submersible pumps in agricultural applications”, pp. pp. 217–224.

- Savio, F.M., Rajan, V.R., Arun Kumaran, B., Sekhar, C.S.A., “Performance analysis of an improved low harmonic indirect matrix converter for drive system in WECS”, Proceedings of 2nd IEEE National Conference on Emerging Trends in New and Renewable Energy Sources and Energy Management, 2015, pp. 214–220.
- Max Savio, F., Sasikumar, M., “Performance characteristics of three phase wind driven SEIG for drive applications”, IET Conference Publications, 2012, 2012(624 CP), pp. 230–235.
- Marian, A.R., Savio, F.M., Anish, P.S., Sasikuma, M., “Performance characteristics of five level diode clamped multilevel inverter for induction motor drives”, Proceedings of International Conference on Emerging Trends in Electrical Engineering and Energy Management, 2012, pp. 350–354.

PATENTS PUBLISHED/GRANTED:

- An Electric Vehicle Battery Temperature Detection by using High ZT Value of Silicon Crystal (2020104212) – Granted
- Dust cleaning system using line follower logic with Arduino (201641021514A) - Published
- Elephant Repellence System using Parallel Communication of laser and LDR system (201841049506A) – Published
- Spherical dome oscillating wave energy conversion device (202041019055A) – Published
- A Self – Seated Matrix Auditorium Chair (202141059623A) – Published

COURSES CERTIFIED:

- AICTE QIP PG Program on 3D Printing and Additive Manufacturing from Indian Institute of Information Technology Tiruchirappalli, Tiruchirappalli
- Certified Trainer for Samsung Hand Held Products servicing through SAMSUNG GURU SHIKSHA Program by Samsung India Pvt. Ltd. from 2019

SPECIAL SESSIONS DELIVERED:

- Session speaker for the topic, “Modelling of Electric Vehicle Power Train using MATLAB in the Faculty Development Program on Electric Vehicle: Technological Innovations and Market Trends on 02.12.2024.
- Guest Speaker on the topic, “The Future of Electric Vehicles in India” for the IEI Workshop on, “An Overview of the Present and Future Outlook of Electric Vehicle in India Approaches and Perspect” on 29.11.2024
- Guest Speaker for the Topic, “Design of Power Electronic Circuits using PLECS” organized by IEEE Power Electronics Society Madras Chapter on 25.04.2024

- Guest Speaker for the Topic, “Smart Grid Technologies in Modern Electrical Power Systems”, organized by the Department of Electrical and Electronics Engineering, Kings College of Engineering on 15.03.2024
- Guest Speaker for the Topic, “Applications of MATLAB for Basic Power Electronic Circuits”, organized by the Department of Electrical and Electronics Engineering, C. Abdul Hakeem College of Engineering & Technology

SEMINARS/WORKSHOPS/COURSES ATTENDED:

Seminars and FDPs:

- ATAL FDP on, “Electric Vehicle: Technological Innovations and Market Trends” organized by Department of Electrical and Electronics Engineering, Saveetha Engineering College from 02.12.2024 to 07.12.2024
- Two days Workshop on, “An Overview of the Present and Future Outlook of Electric Vehicle in India Approaches and Prospect”, organized by Department of Electrical and Electronics Engineering, Saveetha Engineering College on 28.11.2024 & 29.11.2024
- International One Week Online Faculty Development Program on, “Deep Learning Technique for Social Media Analytics” organized by Kongu Engineering College in Association with College of Computing and Information Sciences, University of Technology & Applied Science – IBRI, Oman from 15.04.2024 to 20.04.2024
- Online Faculty Development Programme on “Aiming Towards 3D’s in Electrical Engineering” from 11-03-2024 to 15-03-2024 organized by the Department of Electrical and Electronics Engineering, Mahatma Gandhi Institute of Technology, Gandipet, Hyderabad.
- Five days online Faculty Development Program on, “Issues, Opportunities and Challenges in Smart Grid”, organized by the Department of Electrical and Electronics Engineering, The Kavery Engineering College, from 20.02.2024 to 24.02.2024
- Five days FDP on, “Emerging Trends and Research Opportunities in Electrical Engineering”, organized by Dept. of Electrical Engineering, JIS College of Engineering from 10.04.2023 to 14.04.2024
- Three days FDP on, “How Teachers Can Make a Difference”, organized by Indian Institute of Technology Madras, Chennai on from 07.02.2023 to 09.02.2023
- Two days FDP on, “Industry 4.0” organized by IEEE India Council from 02.04.2022 to 03.04.2022.
- Five days FDP on, “Controller Design and Implementation for Renewable Power Generation Systems (Hydro, Wind, Solar System)”, organized by the Department of Mechanical Engineering, NIT Meghalaya, India from 07.03.2022 to 11.03.2022
- One day FDP on, “Recent Trends in E-Vehicle”, Dept. of Electrical and Electronics Engineering, Krishnasamy College of Engineering and Technology, Cuddalore on 05.03.2022.

Online Courses:

- Semiconductor Fabrication by Purdue University & University of Texas, Austin and Intel Corporation.
- Basics of Quantum Information by IBM.
- Introduction to Quantum Computing from IBM SkillBuilds.
- Electric Vehicle and Mobility by École des Ponts ParisTech and offered through Coursera.
- Introduction to battery-management systems by University of Colorado Boulder and University of Colorado System and offered through Coursera.

PROFESSIONAL MEMBERSHIPS:

- Member, The Institution of Engineers (India) – M1729289
- Member, Asia Society of Research - R219093349
- Member, International Association of Engineers - 192293

OTHER DETAILS (If any):

- Developed a Gamified MCQ Test platform using JavaScript hosted through GitHub
- Mentor for the batch 2021-2025
- GATE Coordinator
- Website Coordinator