# **CURRICULUM VITAE**

# Name: Dr. Gokulananda Sahu

**Designation**: Principal, Bhubaneswar College of Engineering **Experience: Teaching & Research- 24 years Industry-5 years** 

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# **Educational Background**

- Ph. D in Engineering from NIT, Rourkela, Odisha
- M.Tech in VLSI Design & Embedded System from NIT, Rourkela, Odisha
- B. E. in Electronics from Marathwada Universiy, Aurangabad, Maharashtra

### **Professional Experience**

- Principal, Bhubaneswar College of Engineering, Bhubaneswar, Odisha(2018-Present)
- Associate Professor, Ghanashyam Hemalata Institute of Technology and Management, Puri,Odisha (2000-2018)
- Customer-Support-Engineer, Zenith Computers Limited, Mumbai, Maharashtra (1997-1999)
- Technical Head, Hardcore, a unit of Aptech Limited Cuttack Odisha(1996-1997)
- Networking Consultant, PC POINT Bhubaneswar, Odisha, (1993-1996)

### **Research Publications**

### **National Conferences:**

- [1] **Gokulananda Sah**u, "Real time Implementation of signal processing algorithm on Field Programmable Gate Arrays." NCWCVD, Gwalior, India,2010.
- [2] Gokulananda Sahu, Kaustav Das, Subrat Ku Sahu, "A Compression Study of Antenna Beam forming Using LMS& NLMS Adaptive Algorithm." ISCCIA-2011, Bhubaneswar, India 2011.
- [3] Gokulananda Sahu, S k Sethi, J Kalia "MIMO: A Gateway to Increase Channel Capacity." ISCCIA-2011 ,Bhubaneswar, India 2011.
- [4] Gokulananda Sahu, J Kalia, S K Sethi, "Meta Structured Compact Antenna for Wireless Fidelity" ISCCIA-2011, Bhubaneswar, India 2011.

#### **International Conferences:**

- G. Sahu and K.Mahapatra, "Comparison of control strategies of DSTATCOM for non-linear load compensation." ACEEE International Conference on Computational Intelligence and Information Technology (CIIT), Mumbai, India, 2013, pp. 27-35.
- [2] G. Sahu,K. MahapatraandS. K. Sahu, "Design and performance analysis of DSTATCOM for nonlinear load composite compensation." *Springer International Conference on Frontiers of Intelligent Computing: Theory and Application (FICTA)*, Bhubaneswar, India 2013, pp. 337-344. (Scopus Indexed)
- [3] G. Sahu and K. Mahapatra, "Real time implementation of digital filter on control strategy of DSTATCOM for load compensation under distorted utility condition," *IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics and Electronics (PrimeAsia)*, Visakhapatnam, 2013, pp. 164-169. (Scopus Indexed)
- [4] G. Sahu and K. Mahapatra, "A novel control strategy of DSTATCOM for load compensation under distorted utility condition," *IEEE International Conference on Advances in Electrical Engineering (ICAEE)*, Vellore, 2014, pp. 1-6. (Scopus Indexed)

- [5] G. Sahu, V. R. Kolluru and K. Mahapatra, "Rapid prototyping of FPGA based digital controller of DSTATCOM for load compensation under distorted utility condition," *IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (SPICES)*, Kozhikode, 2015, pp. 1-5. (Scopus Indexed)
- [6] V. R. Kolluru, G. Sahu, K. Mahapatra and B. Subudhi, "Design and simulation of a modified sliding mode controller evaluated with a conventional P&O MPPT controller for solar applications," *IEEE International Conference on Signal Processing, Informatics, Communication and Energy Systems (SPICES)*, Kozhikode, 2015, pp. 1-5.(Scopus Indexed)
- [7] G. Sahu and K. Mahapatra, "Model predictive control of DSTATCOM for power quality improvement: Modeling, simulation and analysis-part1," *IEEE International Conference on Power, Communication and Information Technology Conference (PCITC)*, Bhubaneswar, 2015, pp. 1-6. (Scopus Indexed)
- [8] G. Sahu and K. Mahapatra, "FPGA based all-on-chip DSTATCOM control for power quality improvement," *IEEE International Conference on Power, Communication and Information Technology Conference (PCITC)*, Bhubaneswar, 2015, pp. 54-59. (Scopus Indexed)

#### **International Journals:**

- [1] Gokulananda Sahu, Kamalakanta Mahapatra, "Instantaneous symmetrical component: A new approach for load compensation under distorted utility condition." *International Journal of Electrical Power Engineering (ACEEE-IJEPE)*, vol. 5, no. 2, pp. 1-12, 2014. Non-Scopus indexed
- [2] Gokulananda Sahu, Mihir Narayan Mohanty, KamalakantaMahapatra" FPGA based PI controller with new reference generation strategy of DSTATCOM for power quality improvement."Indian Journal of Public Health Research and Development, vol. 9, no. 11, pp. 2314-2321, 2018. (Scopus Indexed.)
- [3] Gokulananda Sahu, Kamalakanta Mahapatra, "Non-Linear-Variable-Gain Fuzzy Control with Finite Control Set Model Predictive Based DSTATCOM System to Improve Power Quality in Distribution System." International Journal of Power Electronics, Inderscience.(in production) DOI: 10.1504/IJPELEC.2021.10022060. (Scopus Indexed.)
- [4] Gokulananda Sahu, R.K. Patjoshi, RakheePanigrahi, "An Instantaneous Symmetrical Component and Active Power Theory with Finite Control State Based Model predictive Control Strategy for Distribution STATCOM."International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, p.e2821, 2020.(SCIE Indexed)
- [5] Gokulananda Sahu, Rajesh Kumar Patjoshi, Rakhee Panigrahi, "An FPGA Based Novel Digital Controller for DSTATCOM to Enhance Power Quality in Distribution System." The ECTI Transactions on Electrical Engineering, Electronics and Communications, ECTI Association, vol. 18, no. 2, pp. 118-129, 2020 (Scopus Indexed)

- [6] Gokulananda Sahu, Rajesh Kumar Patjoshi, Rakhee Panigrahi, Venkata Ratnam Kolluru "An ADALINE Model Predictive Control Strategy Based DSTATCOM for Power Quality Enhancement" International Journal of Applied Power Engineering, Vol. 13, No. 3, pp. 715-726, 2024 (Scopus Indexed)
- [7] Rajesh Kumar Patjoshi, Rakhee Panigrahi, **Gokulananda Sahu**, Venkata Ratnam Kolluru "Design and Analysis of Process and Parasitic Variation for Optimization-Based CMOS Circuits: A Voltage Control Oscillator Case Study" Iraqi journal for Electrical and Electronic engineering (IJEEE), Year 2024(under review) (**Scopus Indexed**)

# Achievements & Extracurricular Activities

- Recipient of gold certificate in IEEE PrimeAsia-2013 International conference held during 20<sup>th</sup> 21<sup>st</sup> December, 2013 at GEETAM University, Vizag, India.
- > Authored of six research papers on power quality improvement published in International Journals.
- > Author of one text book **Microprocessors**, India Tech Publisher.
- Organizing member of "VLSI Design and Cad Tools" conducted by Department of Electronics and Communication Engineering, NIT-Rourkela. (STC'12 – STC' 14).
- > Chairman of all institute level committee of BCE, BBSR
- > President of Institute Innovation Cell (IIC) Cell BCE, Bhubaneswar.
- > Organizer of Seminar and Faculty Development Programme conducted in BCE, BBSR

### References

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