

Swarrna Karthik Parthasarathy

Student Member, IEEE

pswarrnakarthik@gmail.com

+1 404-457-9368 /+ 91 9940615324

Career Objective

To become a professional expert in the field of improving the Silicon Engineering , for both Digital, Analog & Opto-Electronic Semi-Conductors which involves design of high speed hardware interfaces, integration of digital, Analog , RF & Opto-Electronic Circuits on a single chip with the aim of decreasing the size and increasing the performance & functionality.

Area of Interest

Improving the functionality, maintainability & miniaturization of Semi-Conductor Devices through innovative VLSI Design and Packaging.

Academic Profile

Under Graduate Studies (2008 – Present)

Electronics and Communication Engineering
SASTRA University, Tanjore, Tamil Nadu, India
CGPA - 9.19/10

Experience

- EMI/EMC related measurements and tests at SAMEER (Society for Applied Microwave Electronics Engineering and Research), Centre for Electromagnetics, Ministry of Communications and IT-Govt. of India, Taramani, Chennai, India.
- Currently working as an Undergrad ‘Research Intern’ in the area of Semi-Conductor packaging at the ‘Interconnect and Packaging Centre’, Georgia Institute of Technology- Atlanta, Georgia, in the area of designing High performance to Ultra-low power digital VLSI systems.

Publications – Referred Conferences

- P.Swarrna Karthik, P.Preyas and V.Chandrasekar, “EMI Mitigation in Low Power RF IC Design & Analysis” , National Conference on Recent Trends in Communication Engineering – NCRTCE’10 Proceedings, Nov 2010, pp.4-5
- P.Swarrna Karthik and S.Swaminathan, “Optimized Design variants of a self- powering CMOS Opto-Electronic VLSI Circuit,” International Conference on Computer Applications-ICCA’12 Proceedings-Digital Computing system, Electronic Data Systems, Embedded Control Systems, High Performance Computation, Vol.3, Part-III, no.4, Jan 2012, pp.145-149.(ISBN: 978-81-920575-6-9)

Conferences and Workshops

- “2nd Science Conclave: A Congregation of Nobel laureates”, IIIT, Allahabad, India, 2009.
- “Sustainable Leadership Programme” conducted by the University of Cambridge in association with the German Ministry of Education Initiative, 2010.

Relevant Courses

Electric circuit theory, Electronic circuits, Digital electronics, Quantum Mechanics, Linear Integrated circuits, Signals and Systems, Network Theory, Microwave Eng., Microprocessors, Microcontrollers, Digital Signal Processing, Antenna & Radio-wave propagation, Virtual Instrumentation, VLSI design, Embedded Systems

Technical Skills

Programming Language: C, C++, VHDL

Software: Mat lab, MultiSim, Lab View, Mathematica, PSPICE

Academic Achievements

- Cleared the first and second levels of the Regional Maths Olympiad and NMTC'39 conducted by the “The Association of Mathematic Teachers of India” in the year 2007 at Chennai, India.
- Proposed a Feasible working model of an ‘Energy saving flywheel and Power Generator’ for Council of Scientific and Industrial Research – India, Sponsored Young Talent Competition and the report was sent to CSIR-New Delhi, India in the year 2007.
- Named in the Dean’s Merit list for being in the top 3-10% of the Under-Graduate batch in terms of Academic performance during the first year of my course in my University.
- Recipient of the Central Board of Secondary Education Merit Scholarship under the Ministry of HRD-Government of India Central Sector Scholarship Scheme- Rs10,000 per year till Post-Graduation given by Ministry of HRD, New Delhi.-India.
- Named in the Dean’s Merit list for being in the top 3-10% of the Under-Graduate batch in terms of Academic performance during the third year of my course.
- Currently in the top 2.5% in the Electronics & Communication Dept. of the entire University.
- Awarded Merit certificates for the excellence in the curriculum courses.

Co-Curricular Activities

- Co-ordinated a workshop on Ethical hacking conducted By IIT Kharagpur and Kyrion technologies in my campus.
- Was an integral part of the Technical and Finance Committee in the National level Techno-management Fest Theta’11 organized in my campus.
- An active member of the elite community of the ECE Dept. ‘ELCOM DIAS’ of my campus.