

Pranit Namdeorao Jadhav

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Objective

- Seeking a challenging and growth oriented career where I can fully utilize my skills and available resources with opportunity for professional growth and to excel by contributing toward the achievement of organizational goal.

Education

M.TECH | PURSUING | INDIAN INSTITUTE OF TECHNOLOGY HYDERABAD

- Specialization: Microelectronics and VLSI
- CGPA: 7.97 (till 3rd semester)
- Related coursework: Digital IC Design and Verification, Embedded System, Analog IC Design, Semiconductor Device Modelling, VLS Technology, Embedded Memory Design, High Speed Digital Design.

B.TECH | 2012 | SHRI GURU GOBIND SINGHJI INSTITUTE OF ENGINEERING AND TECHNOLOGY, NANDED

- Stream: Electronics and Telecommunication
- CGPA: 6.07

HSSC | 2008 | SOMALWAR JUNIOR COLLEGE, RAMDASPETH, NAGPUR

- Major: Science
- Percentage: 88%

SSC | 2006 | BAL MANDIR SECONDRY SCHOOL, BAJAJ NAGAR, NAGPUR

- Major: English, History, Mathematics, Science, Geography
- Percentage: 82.40%

Area of Interest

- Digital Circuits, Digital System Design, Low complexity architecture, Embedded System Design, VLSI for Signal Processing, Analog circuits,

Skills

PROGRAMMING LANGUAGES

- C, C++, Perl, Python, Verilog HDL, Embedded C, MATLAB, Assembly language Programming of 8085, 8051, ARM LPC2148.

TOOLS

- ModelSim, Matlab, Simulink, System Generator, Xilinx-ISE, Xilinx Vivado, Cadence Virtuoso ADE, Cadence Encounter, RTL Compiler, Synopsys DC Compiler, Synopsys IC Compiler.

Projects

M.TECH PROJECT (CURRENTLY WORKING)

TITLE: DESIGN OF EEG SIGNAL PROCESSOR FOR REMOVAL OF BLINK AND MUSCLE ARTEFACT

DESCRIPTION: This project aims at removing the artefacts from EEG signals like Blink and Muscular, which pose a problem in diagnosis and are generally discarded by the doctors. The main focus is to preserve those information after successful removal of artefacts and design a hardware to provide diagnosis. The algorithm uses Discrete Wavelet Transform (DWT)

computation and Wavelet Power Spectrum (WPS) calculation. The design is done in Verilog HDL and implemented on Xilinx Spartan 6 kit. Currently working on the ASIC implementation.

ACADEMIC COURSE PROJECTS

TITLE: DESIGNING OF 6T SRAM CELL AND READ/WRITE DELAY MODEL OF 256*64 SRAM MEMORY.

DESCRIPTION: The project aimed the modelling of a 256x64 6t SRAM memory module using UMC 65nm technology library. It was designed and analyzed considering all the real time parameters (Gate Capacitance, Fan-Out values, Noise Margins) of the CMOS transistors and parasitic effect of wires were modelled using RC delay models in Cadence Virtuoso.

TITLE: RF ENERGY HARVESTING

DESCRIPTION: The aim of the project is to design a system which will harvest energy from RF source and produce an output of 3.3v to charge a battery. The design consists of a matching network followed by rectifier circuit, simplified Dickson's charge pump and clock generation circuit.

B.TECH PROJECTS

TITLE: POWER CONTROL USING MICRO CONTROLLER FOR EFFICIENT MOLDING OF PLASTIC

DESCRIPTION: This project aims at maintaining the temperature of the different ceramic heater at different desired point using micro controller 8051 and Thyristors i.e. SCR for efficient molding of plastic and reducing its losses during manufacturing process. It was implemented successfully at Videocon Aurangabad.

TITLE: AUTHENTICATION SYSTEM USING BIOMETRIC MODULE

DESCRIPTION: This project aims at low cost, high level security system based on biometric scanning of human fingerprints and eye retina for home users.

Extra-Curricular Activities

- Team Manager at IITH-Cricket league 2014 (ICL), was awarded Best Manager title and won ICL cup.
- Teaching Assistant for Embedded System, Digital IC Design and Verification, Embedded Programming and VLSI Lab.
- Purchase Head and active team member for Team KNIGHTRIDERS, participated in SUPRA SAEINDIA 2011 (Competition of designing & fabricating F1 type car) during 1st to 3rd July 2011 held at Madras Motor Sports Club, Chennai.
- Represented Institute in NANDED AHEAD 2011 (Investors meet), Institute won 1st prize for Best Technical Innovative Idea.
- Member of Society of Automotive Engineers of India (SAEINDIA).
- Student Vice Chair-Person for SAEINDIA Collegiate Club during 2010-11.
- Participated in technical event WINGS held at Govt. Engg. College, Aurangabad, during 26-28th march 2010.
- Participated and 2nd prize winner in OPEN HARDWARE event at PRAGYAA 2011 (National Level Technical Event) held at S.G.G.S.I.E & T, Nanded.

Publication

- Jadhav, P. N., et al. "Automated detection and correction of eye blink and muscular artefacts in EEG signal for analysis of Autism Spectrum Disorder." *36th Annual International Conference of the IEEE, EMBC, 2014.*
- Jadhav, P. N., et al. "Affordable low complexity heart/brain monitoring methodology for remote health care." *37th Annual International Conference of the IEEE, EMBC, 2015.*
- Jadhav, P. N., et al. "Online and Automated Reliable System Design to Remove Blink and Muscle Artefact in EEG." *37th Annual International Conference of the IEEE, EMBC, 2015.*

Awards

- Recipient of *Excellence in Research 2015* award at IIT Hyderabad.

Personal Details

- Date of Birth: 18/06/1990
- Languages Known: English, Hindi, Marathi
- Hobbies: Reading, Travelling, Trekking, Listening Music.

Declaration

I hereby declare that the above mentioned information is true to the best of my knowledge.

Yours Sincerely,

Jadhav Pranit Namdeorao