

Susan Tiwari

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Education

Bachelor of Science in Computer Engineering

Expected: December 2020

St. Cloud State University, Saint Cloud, MN

Program nationally accredited by the Engineering Accreditation Commission of ABET

GPA: 3.29

Relevant Experiences

Senior Design Project

- Built a microscopic thermal imaging system for failure analysis of electronic components.
- Used analog and digital temperature sensors, IR camera for generating thermal images and motors for bidirectional scanning controlled by Raspberry Pi and PIC 24.
- Enhanced communication and research abilities by studying articles, books and journals, writing weekly update of the research project, and presentations.

Microprocessor / Microcontroller System Design

- Developed and demonstrated the knowledge of interrupt handling, SPI, ADC, UART using C, C# and assembly with LPC1114, MCB2300 and PIC24
- Designed and developed a wireless digital oscilloscope, spectral analyzer, real time digital signal processing system using C#, Bluetooth, PIC24.

Digital / Analog Circuit Design and Analysis

- Gained experience in circuit and component modeling, amplifiers, filters and signal processing.
- Built and analyzed an operational trans-conductance amplifier using BJTs, resistors and capacitors

FPGA Based Digital Circuit Design

- Designed and implemented FPGA architecture with computer aided analysis and simulation on Digilent Nexys A7 and Xilinx Digilent ZedBoard Zynq-7000 boards

Employment

Concessions Supervisor, CHARTWELLS HIGHER ED

Dec 2017 - Jan 2019

- Demonstrated customer service ability by resolving customer issues.
- Developed leadership and multi-tasking capabilities by training and supervising employees and volunteers, and handling multiple tasks assigned to supervisors.

Teaching Assistant, DEPARTMENT OF MATHEMATICS

Aug 2017 - Dec 2017

- Reviewed class material with students by discussing text, working solutions to problems.
- Organized tutoring environment to promote productivity and learning.

Technical Skills

- **Programming Languages:** C++, C, C#, MATLAB, R, Verilog/VHDL, .NET, Assembly, Java
- **Operating Systems:** Windows, Mac OSX, Linux
- **Software:** Microsoft Office, LtSpice, Pspice, Eclipse, MPLAB X, Keil Uvision, CCS C Compiler, Xilinx Vivado
- **Hardware:** Oscilloscope, Logic Analyzer

Activities and Involvement

- Marketing Coordinator, Atwood After Dark, (UPB)
- Volunteer Coordinator, Nepalese Student Association

Aug 2016 - Mar 2017

April 2017-Feb 2018