H. M. NIMASHANI PERERA

PROFILE

I am a young electronic engineer who likes to serve the community through the state of the art technology, innovation, and entrepreneurship.

PERSONAL PARTICULARS

Gender	Female
Date of Birth	25/01/1993
Nationality	Sri Lankan

CONTACT INFORMATION

Mobile	+65 8672 2178
Email	nimashi001@gmail.com

EDUCATIONAL QUALIFICATION

➢ M. Sc (Electrical Engineering), National University of Singapore
Specialization: Nanoelectronics
Current GPA: 4.1/5
Relevant Coursework : VLSI Digital Circuit Design, Magnetic Data Storage for Big Data

Expected year of graduation: Dec 2018

➢ B. Sc (Hons) in Electronic and Telecommunication Engineering, University of Moratuwa, Sri Lanka
GPA: 3.9/4.2 (first class honours)
Relevant Coursework : Digital IC Design, Digital Systems Design, Advanced Electronics, Computer Organization, Digital Electronics

2013 – 2017

➢ G.C.E Advanced Level
Subject results: AAA grades for chemistry, physics and applied mathematics
District rank: 10, Island rank: 149

2011

➢ G.C.E. Ordinary Level
Subject results: 8As and a B

2008

PROJECTS

➢ Real Time Object Detector Based on image Processing (FPGA based hardware architecture designed to implement Deformable Parts Model vision algorithm)
- Designed units to extract the features of an input image and to apply filters for object detection
- Technical areas: Verilog programming, MATLAB

➢ FPGA based implementation of high performance processor using RISC V ISA
- Developing the memory interface between cache and memory using AXI AMBA (Advanced eXtensible Interface, Advanced Microcontroller Bus Architecture)
- Technical areas: Verilog programming

➢ Transistor level circuit designing using Cadence IC design tool
- Designing a D-latch and a D Flip flop and investigating timing parameters for different supply voltages
- Design an inverter chain to minimize the path delay with logical effort methodology
- Layout development
- Technical areas: VLSI circuit design methodologies

➢ Designing a free layer of MRAM (Magnetic RAM) cells suitable for a high density and low power operation
- Investigating the design parameters for MRAM cells
- Simulation of MRAM cell using OOMMF software
- Technical areas: behaviours of magnetic nanostructures

WORK EXPERIENCE

Synopsys, Sri Lanka | Applications Engineer   **April 2017 – Dec 2017**

- ➢ Member of the verification team for Verdi Debug Software, a commercial debug software developed by Synopsys for the electronic industry
- ➢ Validating projects/ enhancements/ bug fixes for the software product Verdi Debug
- ➢ Definition of test specification, test case development and implementation, performance testing
- ➢ Gained basic knowledge of VCS, a simulation software
- ➢ Gained a thorough knowledge on software development cycle

Hardware and Embedded Systems Lab (HESL) | Engineering Intern   **Oct 2015 – April 2016**
Nanyang Technological University, Singapore

- ➢ Implementation of DPM computer vision algorithm in an FPGA embedded development environment using Verilog
- ➢ Cross verified the results of the implementation using MATLAB

ACHIEVEMENTS

- ➢ Dean's list award for semester 2,3,4,7,8 (semester 6 was not accounted for GPA calculation as it was the semester allocated for internship).
- ➢ Team member of 2011 all island inter-school chemistry quiz organized by the Institute of Chemistry Ceylon. The team was ranked 7th beating 30 participating teams.
- ➢ Quarter finalist of Sri Lanka genius 2008. The competition saw 4000 students all over the island. The competition was co-organized by University of Colombo and Dialog Telecom PLC.
- ➢ Champion of women's double badminton tournament (Tronic Shuttle Fest 2014 and 2016) organized by the electronics department of the university.
- ➢ Winner and runner-up awards in drama and singing at Provincial Level Language Competitions (North Western Province) for the years 2006 and 2007.
- ➢ Winner of 2002 all-island inter school western music & dance competition.

EXTRA CURRICULAR ACTIVITIES

- ➢ Semester 5 representative for the Electronics and Telecommunication Engineering batch   2015
- ➢ Member of SLRC-E Club. Organization of robot competitions in the university   2014
- ➢ Member of CSM (Catholic Students Movement) in the university   2012 - 2017
- ➢ Treasurer of Holy Family Convent Kurunegala science society   2010
- ➢ Member of Holy Family Convent Badminton team   2005 - 2009
- ➢ Senior Girl Guide of Girl Guide Association   2005
- ➢ Prefect of Holy Family Convent   2003

SKILLS AND COMPETENCIES

➢ Hardware description languages	-	Verilog, VHDL, System Verilog
➢ Computing/ Simulation Skills	-	Cadence IC design tools, Xilinx Vivado design suite, MATLAB/ Simulink, OOMMF, Altium Designer, Orcad Capture/PSpice
➢ Programming languages	-	C/ C++, Java, LaTeX

INTERESTS

- ➢ Embedded system Design, Digital system design, SoC design
- ➢ Playing badminton and singing

REFEREES

Asst. Prof. Lam Siew Kei
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