

KAMAL LAMICHHANE

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EDUCATION

University of Waterloo, Waterloo, ON Canada

Sept 2017

MASc in Electrical & Computer Engineering, Computer Software

Major in Embedded Systems & Software , Real-time Embedded Software Group. **Courses:** Algorithm

Design and Analysis, Design and Analysis of Experiment, and Computer Aided Verification

Nitte Meenakshi Institute of Technology, Bangalore, India

May 2015

B.E. in Electronics & Communication Engineering

Overall GPA: 9.73, Gold metal, Dept. of ECE

WORK EXPERIENCE

Research Student at Center for Small Satellite Research, NMIT

July 2014-June 2015

Command & Data Handling for Project STUDSAT-2

Bangalore, India

- Implemented Real Time operating system using FreeRTOS from FreeRTOS inc. Identified sixty four different Task for the proper operation of the satellite right from the ejection which helped in development of operational flow.
- Performed RTOS performance evaluation to evaluate the RTOS metrics and memory management for the STUDSAT-2.
- Developed Mission sequence for Project STUDSAT-2 right from ejection from PSLV till the end of life time of the satellite, considering all the specification of projects.

Technical: FreeRTOS, C, C++, Matlab Simulink.

Indian Institute of Science

May-July 2014

Summer Research Fellowship Program-2014, Antenna Designing & Modelling

Bangalore, India

- Designed and simulated four different wideband antennas for aircraft application.
- Designed Vivaldi antenna with operational frequency ranging 2-6 GHz with return loss less than -16 dB.
- Designed Spiral antenna, Sinuous antenna, and Multi-arm Spiral Antenna to obtain NULLs in full 360° with good return loss and gain.

Technical: CADFEKO, Matlab, HFSS, C.

Technophilia Systems, RCAI, CMU, USA

June 2013

Advance Robotics

Bangalore, India

- Successfully conducted hands-on experiments on interfacing of different peripherals and I/O devices (acceleration sensor, optical sensor, analog sound sensor, matrix LED display module, IR wireless communication module, relay board used in home and industrial automation systems).
- Developed Line follower Robot, DTMF controlled Robot, Wireless controlled Robot, Brain wave controlled & Home Automation System.

Technical: C, C++, ROBOT C, Cadence, Arduino

RELEVANT PUBLICATIONS

Embedded RTOS Implementation for Twin Nano-Satellite STUDSAT-2 IEEE 2015
Kamal Lamichhane, Kiran M, Kannan T, Sandya S; *Embedded RTOS Implementation for Twin Nano-Satellite STUDSAT-2, 2nd IEEE International Conference on Metrology for Aerospace, 978-1-4799-7568-6/15//31.00 2015 IEEE June 4-5, 2015, Benevento, Italy.*

Operational Flow for Twin Nano-Satellite Mission IEEE Metrology June 2015
Kamal Lamichhane, Kiran M, Kannan T, Sandya S; *Operational Flow for Twin Nano-Satellite Mission, 2nd IEEE International Conference on Metrology for Aerospace, 978-1-4799-7568-6/15//31.00 2015 IEEE June 4-5, 2015, Benevento, Italy.*

Implementation and Comparative Study of Algorithms to Avoid Obstacles in Mobile Robot Navigation July 2014
Min Raj Nepali, Amar Mani Aryal, Ashutosh and Kamal Lamichhane. Implementation and Comparative Study of Algorithms to Avoid Obstacles in Mobile Robot Navigation. International Journal of Computer Applications 97(11):13-18, July 2014.

Early Breast Cancer Detection Using Statistical Parameters March 2014
H.C.Nagaraj, Prasanna Paga Kamal Lamichhane. Early Breast Cancer Detection Using Statistical Parameters. IMPACT: International Journal of Research in Engineering Technology (IMPACT: IJRET) ISSN(E): 2321-8843; ISSN(P): 2347-4599 Vol. 2, Issue 3, Mar 2014, 31-36.

TECHNICAL STRENGTHS

Programming	C/C++, Python, Java, ALP, VHDL, and HTML5
Processing Platforms	x86, Arduino, MSP430, ARM Cortex M4, ARM A8, and Atmel.
Statistical tools	R, and SAS
Operating Systems	Unix, Linux, Embedded Linux, Windows
Tools	Tanner Tools, TINA, Eclipse, Xilinx ISE, Pspice, Keil, Modelsim, FEKO.

ACHIEVEMENTS

- Currently holding Graduate Research Scholarship and International Master's Student Award from the University of Waterloo.
- Received Gold Medal from the Electronics and Communication department, Nitte Meenakshi Institute of Technology, in Bachelor of Engineering.
- Granted Full scholarship to pursue B.E from Embassy of India, Kathmandu Nepal. (Entrance -13th Rank).
- Awarded Golden Jubilee scholarship from Embassy of India to pursue Bachelor of Science in Nepal.
- Awarded by Lions Club of Pokhara various organization for securing highest score among the student from government school.