



Sumit Pandey

Master of Science

Centre for Reliability Sciences and Technologies

Department of Electronic Engineering

Chang Gung University, Taiwan

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Education

| Examination | University | Institute | Year | Percentage/CGPA |
|--------------|------------|--------------------------------------|------|-----------------|
| M. S. | CGU | Department of Electronic Engineering | 2020 | 82% |
| Graduation | UTU | Dehradun Institute of Technology | 2016 | 68% |
| Intermediate | UKBE | V.V.M. Inter College Bageshwar | 2011 | 60% |



Research

Research Experience

Research Assistant

Machine Learning and Statistical Analysis

Supervisor: Prof. Cher Ming Tan

CReST Lab, C.G.U., Taiwan

17-Feb, 2018 to Present

Research Assistant

Deep Learning Applications in Medical Sciences

Supervisor: Prof. Kuan Fu Chen

C.G.M.H. , Linkou, Taiwan

10-Nov, 2018 to Present

Research Intern and Research Trainee

Swarm Terrain Profiler Robotics System

Supervisor: Assoc. Prof. (Dr.) Praveen Kant Pandey

MAC, University of Delhi, Delhi

Jan- June, 2016 and Aug,16- Jan,17

Course Projects (Theses)

Automatic Fire Initiated Braking And Alert System For Trains. (Guide: Prof Sandeep Sharma)

Designed A wireless embedded system that will be used to alert people during precarious fire accidents so that life as well as the damage can be minimized.

Swarm Terrain Profiler Robotics System-STPRS. (Guide: Assoc. Prof Praveen Kant Pandey)

An autonomous terrain profiling multi-robotic system designed for stationary work and is equipped with multiple sensors to get information on its surroundings.

Research Publications : Journals

Cher Ming Tan, Udit Narula, Lu An Lai, Sumit Pandey, Jung Hua Tung, Chung Yi Li, “**Optimal Maintenance Strategy on Medical Instruments used for Haemodialysis Process**”, Eksplotacja I Niezawodność - Maintenance And Reliability accepted on February 2019.

Sumit Pandey, Cher Ming Tan, Hsiao-Wen Chen, Yao En Xie, Jung Hua Tung, Yu-Chuan Kau, Chia-Chih Liao. ‘**Pulse Oximeter for Low SpO2 Level Detection Using Discrete Time Signal Processing Algorithm**’, Journal of Medical Devices, Transaction of ASME (American Society of Mechanical Engineers)



Research Publications: Conferences

Sumit Pandey, Abhishek Mishra, Sandeep Sharma. “**Automatic Fire Initiated Braking And Alert System For Trains**” presented at Second IEEE International Conference on Advances in Computing and Communication Engineering ICACCE 2015 and published in the conference proceeding ISBN-13: 978-1-4799-1734-1 and also published in IEEE explore.

Tan Cher Ming, Udit Narula, Lu-An-Lai, Sumit Pandey, Zung Hua Tung, Chung Yi Li “**An Illustration of Predictive Maintenance on Medical Instruments using Haemodialysis Machines**”, ANQ Congress-2018 (Asian Network Quality, 19-20th September 2018, held in Almaty, Kazakhstan) (Selected as a best paper)

Sumit Pandey ,Amrindra Pal ,Sandeep Sharma., “**Smart Automatic News Paper Vending Machine Controller Ic**” Proceedings of National Conference on Striving and Thriving towards diffusion of student -driven research in science and technology for inspired learning, ISBN: 978-81-7273-958-4

Praveen Kant Pandey, Maneesha, Sandeep Sharma, Vivek Kumar, Sumit Pandey, “**An Intelligent Terrain Profiling Embedded System for Underwater Applications**” presented at 2018 4th International Conference on Computational Intelligence & Communication Technology (CICT) and published in the conference proceeding and IEEE xplore, doi: 10.1109/CICT.2018.8480329.



Major Technical Skills

MATLAB | Python | MS-Office | R (novice)



Posts Held

| | | |
|-----------------|--------------------------------------------|---------------------|
| Vice President | IEEE-DIT Student Chapter | Aug 2014 - Aug 2015 |
| Technical Head | SPIE-DIT Student Chapter (World's largest) | Aug 2014 - Aug 2015 |
| Student Adviser | Literary Club, DIT, Dehradun | Aug 2014 - Aug 2015 |



Extra Courses

“6.86x: Machine Learning with Python-From Linear Models to Deep Learning”, **Massachusetts Institute of Technology**. [\[certificate\]](#)

“Remote Sensing, Geographical Information System &Global Navigation Satellite System” Indian Institute of Remote Sensing a research center of **Indian Space research Organization(ISRO)**.



languages

| Language | Speaking Proficiency | Writing Proficiency |
|----------|----------------------------|---------------------|
| Hindi | Excellent (Native Speaker) | Good |
| English | Good | Good |
| Sanskrit | Intermediate | Good |