

CURRICULUM VITAE

Vinay Kumar Pandey

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Education

Ph.D (Pursuing): Biomedical Engineering

Master of Technology (2014 – 2016)

North Eastern Regional Institute of Science and Technology

Bachelor of Technology (2008-2012)

Gautam Buddha Technical University (Formally known as Uttar Pradesh Technical University)

Projects/Experiments

1. Design and analysis of sub-threshold CMOS logic circuits working in below threshold mode of operation
2. 3T-XOR based area and energy efficient Full adder
3. Density Based Traffic Light Timing Control Using Microcontroller.

❖ Certificate course in Telecom Technology and Management from Indian Institute of Technology, Delhi (2012-2013)

Technical and Software Skills:

- 1) Extensive knowledge of all Microsoft Office programs
- 2) Completed advanced courses in Excel, PowerPoint and Word
- 3) Experienced in the use of advanced Internet search engines
- 4) Ability to produce systematic reviews using databases such as PubMed, NCBI and IEEE
- 5) Proficient in a range of electronics software packages including the Cadence, Matlab, Verilog and VHDL

Teaching and Research:

2016 – Present

North Eastern Hill University as Research Fellow

Research Teaching Associate

- Supervision of up to 40 undergraduates in practical laboratory classes
- Support to students with their projects
- Marking for signal processing, biomaterials.

2014 – 2016

North Eastern Regional Institute of Science and Technology

- Supervision of up to 40 undergraduates in practical laboratory classes
- Class tuition and marking for Digital Electronics, Basic Electronics.
- Support to students with their projects

Summer Training:

Hindustan Aeronautics Limited

- ✚ Introduction to Sukhoi-30MKI and MIG aircrafts
- ✚ General Purpose ATE for Repair & Testing of Multilayer PCBs having VLSI/Hybrid components
- ✚ Automatic Test Equipment for testing of Electronic modules

School/Workshop Attended:

1. International Brain Research Organization (IBRO) workshop on Neural plasticity in health and disease at AIIMS, New Delhi.
2. International Brain Research Organization (IBRO) workshop on Cognitive Neuroscience 2018 17th June 2018 to 29th June 2018 at Indian Institute of Science, Bangalore, 2018.
3. 2nd Advanced Training Program in Behavioral Neurosciences, PGIMER Chandigarh. November 14 -16, 2017.
4. Two day workshop on Virtual Laboratory organized by Indian Institute of Technology, Roorkee Department of Biomedical Engineering, NEHU.
5. Five day workshop on Robotics organized by Waayoo at Department of Electronics and Communication Engineering, RITM Lucknow.
6. Two day workshop on MIMICS organized by Nettrack, Materialise at Department of Biomedical Engineering, NEHU.

Conference Organized:

1. International Brain Research Organization (IBRO) Associate School 2017 on Computational approaches in Neuroprotection and Neurorehabilitation from June 05 to June 10 at Department of Biomedical Engineering, NEHU.
2. National Conference on Biomechanics and Rehabilitation Engineering 'BIOREHAB-2016' at Department of Biomedical Engineering, NEHU

Achievements and Awards:

1. Qualified Graduate Aptitude Test in Engineering (GATE-2014& GATE-2017).
2. Participated and got 2nd Prize case-o-logy in university level tech fest at NERIST 2014.
3. Participated and got 3rd Prize case-o-logy in university level tech fest at NERIST 2015.
4. Participated and got 3rd Advertisement in university level tech fest at NERIST 2014 and 2015.
5. Participated and got 3rd Best Manager in university level tech fest at NERIST 2014 and 2015.
6. Got First position in robotics competition(Line Following Robot)

Publications:

Book Chapters/Book:

1. **Vinay Kumar Pandey**, Sudip Paul, Nachiketa Rout. (2018). Book on Cranial Nerves and Oral Motor Disorder in Infants and Adults, Copal Publishing House, India.

Journal Papers:

1. **Vinay Kumar Pandey**, Angana Saikia, Sudip Paul, “Unique Approach to Control Speech, Sensory and Motor Neuronal Disorder through Natural Language Processing and Cognitive Development: A Review”, International Journal on Natural Language Processing, 2018. [Under Review, Submitted on February 12 2018. ISSN No: 2278-1307].
2. **Vinay Kumar Pandey**, Angana Saikia, Sudip Paul. “A Unique Approach of Cranial Nerve Stimulation by Internet Based Therapy”, MedCrave Online Journal of Biology and Medicine (MOJBM), 2018. [ISSN: 2574-9722].
3. **Vinay Kumar Pandey**, Sudip Paul. (2018). Co-occurrences of oral motor disability along with other disorders: A review and prospective, International Journal of Basic and Applied Biology.
4. Angana Saikia, Sudip Paul, **Vinay Kumar Pandey**, “Prevalence of Parkinson’s disease in India: A Review”, Journal of Biomedical Engineering Research and Review, 2017. (E-ISSN: 2349-3232)
5. Angana Saikia, **Vinay Kumar Pandey**, Sudip Paul, “Advancing Research in Parkinson’s Disease - Review, “Journal of The Institution of Engineers (India): Series B, 2018. (**Submitted**)

Conference Papers:

- 1) **Vinay Kumar Pandey**, Divakar Tamang, Vinayak Majhi, Sudip Paul, “Sub-threshold: A Design Technique for Ultra-Low Power Operation”, NCETACS, St. Anthony’s College, Shillong, 2018.
- 2) **Vinay Kumar Pandey**, Sudip Paul, “Therapeutic Devices in Cerebral Palsy Treatment and Management: outcomes and Benefits”, BEATS-2019, NEHU, Shillong. (Accepted)
- 3) **Vinay Kumar Pandey**, Vinayak Majhi, Sudip Paul, “Design and Analysis of Energy Efficient Adder and Multiplier Circuits for Biomedical Application”, ICRTECS-2019, NIT Silchar. (Communicated)
- 4) **Vinay Kumar Pandey**, Angana Saikia, Vinayak Majhi, Sudip Paul “Clinical Intervention of Cerebral Palsy”, 5th Cognition workshop, IISc, Bengaluru, 2018.
- 5) **Vinay Kumar Pandey**, Angana Saikia, Vinayak Majhi, Sudip Paul “Procedure and Protocol to Predict Developmental Dysarthria in Early Stage”, IBRO School, AIIMS New Delhi, 2018.
- 6) Angana Saikia, Sudip Paul, **Vinay Kumar Pandey**, “Correlation between Electroencephalogram and Electromyogram in Parkinson’s disease: A Review”, Neuroscience 2017, Washington DC, 2017.
- 7) Angana Saikia, **Vinay Kumar Pandey**, Sudip Paul, Masaraf Hussain, Amrit Ranjan Baruah, “Assesment of Parkinson’s disease through Clinical and Demographic Data”, Neuroscience 2018, San Diego, 2018.

Magazine Article:

1. Vinay Kumar Pandey, Vinayak Majhi, Sudip Paul, “Yoga: A new paradigm for human well-being and regenerative medicine” Eastern Panorama, 2018.

Referees:

Dr. Sudip Paul

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Mr. Nachiketa Rout

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National Institute for Empowerment of Person with
Multiple Disabilities
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Mr. Anil Kumar Gautam

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