

Curriculum Vitae - Vineet Kumar Tiwari

Address Information

Residence	512 , BR Apartment Suresh Nagar Gwalior-474001
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Current Positions

Currently working as Technical Assistant in Banasthali Vidyapith Rajasthan

Responsibilities

- Design and develop robots and automated systems.
- Develop and manage control systems for industrial automation
- Build AI-driven solutions for smarter robotics.
- Integrate robotics systems with existing technologies
- Proficiency in languages like Python, C++, and Java.
- Ensure that automated systems and robots run smoothly.
- Understanding of robotic systems, sensors, and actuators.
- Testing and debugging robotic process

Young Professional (Dec1,2017 to March 15,2018	Sports Authority of India(SAI), New Dehli Under Khelo India School Games

Responsibilities

- Compilation of performance data with respect to emerging athletes and coaches in various national and international campus in consultation with national sport federation
- Managing all the affairs related to various national coaching campus being run at the regional centre
- Assisting in SAI organizing events of importance
- Assisting SAI in HR related issues/procurement a equipments, goods, services
- Regular maintaining of performance and progression of athletes covered under the development group
- Ranking of players and coaches at National & International and world level
- Carry out all necessary documentations with regard to the National coaching campus such as attendance, data analysis with respect to International/National standards etc

Technology Transfer Professional (April 3, 2017 to November 30, 2017)	National Research Development Corporation (NRDC), New Delhi (An Enterprise of DSIR, Ministry of Science and Technology)

Responsibilities

- Work relating to transfer of Technology for commercial exploitation consisting of sourcing and evaluation of technologies Interacting with R&D institutions/universities, etc.
- Preparation of market research and survey reports, techno-economic feasibility reports, project reports
- Basic Engineering Package
- Monitoring of R&D projects
- Marketing of technologies
- Patent search
- Preparation of project proposals
- To carry out literature search, patent search as or when required for the project/s.
- To manage product/s development from beginning to end
- To review the technology transfer document and product development report
- To ensure that verification results are recorded in lab before transferring to Pilot/production

- Undertaking the various promotional work undertaken by the Corporation in cluster development, rural technologies,
- Dissemination of information on technologies like exhibitions, carrying out industry interaction meets, workshops etc.

Research Positions	
Senior Project Fellow (April 7, 2016 to March 31, 2017)	
Research Activity	**Technology & development solution for Micro Arial Vehicle(MAV)**
Research Lab	*Integrated Circuit Design Laboratory, CSIR-Central Electronics Engineering Research Institute (CEERI), Pilani, India*
Sponsored agency	*Council of Scientific & Industrial Research (CSIR), New Delhi, Govt of India*

Responsibilities

- Interface Circuit Design for MEMS Vibratory Gyroscope
- Interface of MEMS Gyroscope with different Signalling Conditioning Circuit
- Study of Capacitive Sensor with different Signalling Conditioning Circuit
- Study of ZMDI family for providing smart sensor solution

Computation/Software/Tools Skills

Operating System	MS Window, MS DOS, Linux
Designing Tools	Kiel µVision Compiler, Questa Sim (Mentor Graphics), MATLAB, NI LabVIEW, Embedded C
Measurement Instruments	Function Generator, digital multimeters, oscilloscope, vector network analyzer (VNA), Spectrometry ,HPLC etc.

Knowledge & Scientific/Technical Skills

- Proficient in Keil µVision and QuestaSim (Mentor Graphics) tool.
- Familiar with ASIC Front-end Design Methodologies and Verification flows.
- Comprehensive understanding of Digital Design, Verification and Synthesis.
- Hand on experience of developing various Algorithms to test on Embedded based Platforms
- Working experience in over different ARM based development boards for various applications

Industrial Training (-during M Tech)

Period	July 10, 2014 to May 29, 2015
Exposure	PID Controller based control systems
Organization	CSIR-Central Electronics Engineering Research Institute

	(CEERI), Pilani, Rajasthan, India
Industrial Training (-during B. E.)	
Period	July 12, 2010 to July 27,2010
Exposure	Imperium program in Embedded Systems
Organization	ThinkLABS SINE IIT Mumbai, India
Industrial Training (-during B. E.)	
Period	Jan 1, 2010 to Jan 30, 2010
Exposure	Software skills, Personality Development Program
Organization	Hewlett-Packard Limited, New Delhi, India
M. Tech Project Dissertation	
Title	***Design and Development of PID controller of VERTICAL TAKE-OFF & LANDING SYSTEM.***
Abstract	Vertical take-off and landing (VTOL) System consists of variable speed fan with a safety guard mounted on an arm. At the other end of the arm, an adjustable counterweight is attached. This allows the position of the weight to be changed, which in turn affects the dynamics of the system. The arm assembly pivots about a rotary encoder shaft that is used to measure the pitch angle. The VTOL pitch position can be acquired from this setup. Some examples of real-world VTOL

	devices are helicopters, rockets, balloons, and harrier jets. In this part The Vertical Take-off and Landing Trainer (VTOL) Cascade Control system is divided into parts. First one is voltage-current dynamics of DC motor and second one is current-position dynamics of VTOL body. The inner loop PI compensator computes the voltage necessary to reach the desired current. The outer PID controller generates the current reference based on the measured pitch angle. The proposed PID controller in this project is tuned for the pitch angle. IMU (Internal Measurement Unit) sensor sends the data in YPR format to the hyper terminal of the computer. The pitch angle information is extracted from the YPR. Data for post-processing. The post-processing data is then fed to the AVR development board having ATmega1284P for PID implementation
B. E. Project Dissertation	
Title	***Stepper Motor Driver with LCD Panel***
Abstract	A stepper motor is a brushless and synchronous motor which divides the complete rotation into number of steps. Each stepper motor will have some fixed step angle and motor rotates at this angle. Here in this article, interfacing of stepper to 8051 and ULN 2003 is explained. The main principle of this circuit is to rotate the stepper motor step wise at a particular step angle. The ULN2003 IC is used to drive the stepper motor as the controller cannot provide current required by the motor.

Conference Publications

- Small and medium range wireless electronic notice board using Bluetooth and ZigBee

  D. K. Sharma, **V. Tiwari**, K. Kumar, B. A. Botre and S. A. Akbar

  2015 Annual IEEE India Conference (INDICON), New Delhi, 2015, pp. 1-5.,doi: 10.1109/INDICON.2015.7443394

Academic Details

Master of Technology in Instrumentation Engineering

Year of completion	2015
Grade	CGPA: 6.85 (65.72%)
Institute/University	School of Instrumentation (SOI), Devi Ahilya Vishwavidhyalaya (DAVV), Indore, Madhya Pradesh, India

Bachelor of Engineering in Electronics & Communication Engineering

Year of completion	2011
Grade	First Division (70.00 %)
Institute/University	Institute of Technology & Management (ITM), Gwalior and Rajeev Gandhi Technical University (RGTU), Bhopal, India

Teaching Assignment

(I)	**Period**	Aug 10, 2011 to April 9, 2013
	Position	Assistant Professor (Ad-hoc basis)
	Institute	Institute of Information Technology & Management (IITM), Gwalior, Madhya Pradesh, India

Course Taken	Digital Electronics, Voice Communication, Electronic Devices & Circuits, Optical Communication, Communication Systems
Lab Taken	VHDL, EDC, Digital Electronics
Academic Responsibilities	Worked as Project committee co-ordinator for the student of B Tech final year (2012-13) in IITM, Gwalior, India
	Attended the faculty development program in IITM, Gwalior, India
	Served as a Seminar Co-ordinator for the student of pre-final and final years at IITM, Gwalior, India
	Mentor for first year student and active member of discipline committee, counseling for new admissions (strategic plan)
(II) Period	Aug 1, 2015 to Feb 8, 2016
Position	Guest Faculty
Institute	School of Studies In Environmental Chemistry, Jiwaji University, Gwalior, Madhya Pradesh, India
Course Taken	**Instrumentation & Commercial Methods of Industrial Analysis (ICA) for M Sc discipline**
	Contents: Spectrophotometer, Mass Spectrophotometer Spectrometer, X-ray diffraction and their applications etc

Personal details:

Permanent Address	Vineet K Tiwari S/o Sh Balkrishna Tiwari, House No-11, Ward No-6, Purohit Mollah, Post-Phoop Bhind – 477 555, Madhya Pradesh, India
Date of Birth	Nov 6, 1988
Sex	Male
Marital Status	Single
Languages Known	English, Hindi
Nationality	Indian

References :

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Manager,
National Research Development Corporation (NRDC),
(An Enterprise of DSIR, Ministry of Science and Technology)
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Dr BA Botre,

Scientist,

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I hereby declare that the information given above is true and the best of my knowledge.

Date:



Vineet K Tiwari