Aman Tugnawat

Current Address:	*Permanent Address:*	*E-mail:*	aman.tugnawat.app12@iitbhu.ac.in
Room No.3, Rajputana Hostel	House No.824, 14/2,Vikas Nagar	*Nationality:*	Indian
IIT(BHU)-Varanasi	Neemuch-458441	*Sex:*	Male
Uttar Pradesh, 221005	Madhya Pradesh	*Date of Birth:*	17/10/1994

Objective:

Looking forward to work on relevant projects and develop professional level experience to understand and learn further possibilities of my areas of interest.

Area of Interest:

- Embedded Electronic systems.
- Digital Electronics and Microprocessor Interfacing.
- Machine Learning, OS and Android app development.

Project Works / Publications:

1. Creation of an **Android App to receive Analog signals** from **Arduino, Raspberry Pi and Beaglebone Black** interfaced through Bluetooth module as summer intern at Design and Innovation Hub, IIT(BHU).

2. Paper on **Designing of portable and low cost ECG Signal Acquisition System** in JOURNAL OF BIOLOGICAL ENGINEERING RESEARCH AND REVIEW.http://goo.gl/6n6KrA

3. Presented paper on **Brain Computer Interface** (BCI): An User Independent Brainwave Pattern Analysis Framework using Modified Hadoop Neural Network at the National Conference FTBH-2014 on Oct.17 at IIT(BHU).

4. Currently working on **low cost 3-lead ECG machines** for rural areas to monitor health on Android Smart Phones at Networked Communication and Computation Lab, IIT(BHU)-Varanasi under Dr N.S. Rajput Dept. of Electronics.

5. In 1st year presented **a 3-dimensional(8x8x8) LED cube using bit-shift IC** (74HC595) **as a possible new display technology** in Technex'13(i.e. the annual Techno-Management Fest of IIT-BHU).

6. In 2nd year designed the college's first **Android controlled robot** using based on Bluetooth Serial Protocol (SPP) and self-made android app.

Technical Skills:

Programing languages:

- JAVA
- C
- PHP and SQL
  *basic knowledge of C++ & Python.

Operating Platforms:

- Ubuntu 14.04
- Microsoft Windows 7 and 8.1

Applications and technical experience:

- Raspberry Pie and various Embedded Dev. Board
- MATLAB 2012a
- Android Studio
- Eclipse for Android app development(ADT)
- Arduino and CV-AVR
- GCM and basic Networking
- Google apis and JSON Parsing
- Proteus ISIS 8

Achievements:

- **Secretary of Technical Outreach Club**, Science and Technology Council and also of the panel member of the robotics club, Indian Institute of Technology (BHU).
- **Coordinator** for the Event **Modex-Open Hardware** in college's Techno-Management Festival Technex'15.
- **Proposed and Formulated** India's first Android mobile device controlled Robotics event named SmartTouch in Technex'14 (the annual technical fest of the college) for the First Time in college. https://play.google.com/store/apps/details?id=com.at.smarttouch
- Qualified the test for national research scholarship program KVPY (Kishore Vaigyanik Protsahan Yojana).
- Cleared the prestigious Indian Institute of Technology-Joint Entrance Examination (IIT-JEE) and was placed among the top 1% of more than 0.45 million students.
  (All India Rank-4601)
- Secured ranks in top 1% of about 1.1 million students in prestigious national level exam All India Engineering Entrance Exam (AIEEE).
- Qualified other competitive examinations like entrance exams for National Defence Academy (NDA) and BITSAT with good score.

Currently enrolled in :

5-Year Integrated M.Tech in Engineering Physics
3nd year (6th semester)
Dept. of Physics
Indian Institute of Technology (BHU)-Varanasi

*CPI –Cumulative Performance Index
*SPI - Semester Performance Index

Scholastic Background:

Year:	Class/Course:	College/Institute:	Dept./Board:	Result:
2009	High school (X-Standard)	Carmel Convent Sr.Sec.School	C.B.S.E.	(PCMB)-93.5%
2011	Intermediate (XII-Standard)	Alpha English H.S. School	M.P.B.S.E	(PCM)-83.33%
2012	1st year (Sem-I)	IIT(BHU)	Physics Dept.	SPI-7.13 CPI-7.13
2012-13	1st year (Sem-II)	IIT(BHU)	Physics Dept.	SPI-6.85 CPI-6.99
2013	2nd year (Sem-IV)	IIT(BHU)	Physics Dept.	SPI-7.10 CPI-7.03

Educational Qualification:

Relevant Courses:

Physics:
- Digital Electronics & Microprocessors
- Semiconductor Physics & Devices
- Electromagnetic Theory and Waveguides

Maths:
- Linear Algebra
- Mathematical Methods
- Numerical Analysis

Electrical:
- Power Transmission & Distribution
- Electrical Circuits and Machines (Electrical Engineering)

Electronics:
- Analog Circuits & Systems
- Electronic Devices & Components

Extra-Curricular:

- Panel Member at Robotics club and speaker for various robotics workshop held at college.
- Represented IIT-BHU officially in Techfest'14 (the annual technical fest of IIT-Bombay) making **a line follower Hover-craft** in the event Hover-On.
- **Android Apps:** 1) Androbot: https://play.google.com/store/apps/details?id=com.at.androbot
- Interested in **Free style dancing**.

Declaration

I certify that the above information is true to the best of my knowledge.
Yours sincerely,
Aman Tugnawat.