



Sumit Randhawa

Phone: (M) +91 9876638162

Email: sumitr9@gmail.com

Flat No. 104, GH-11,
Sector-20, Panchkula,
Haryana - 134116

OBJECTIVE

To obtain a challenging position in the **Teaching(Physics)** with a progressive organization that will fully utilize my technical, managerial & creative skills and help me reach higher echelons.

WORK SUMMARY

ICAFI University, Baddi (Sep'16 – Till Date) Physics Faculty

**Shree Ram Mulkh Institute of Engineering & Technology (S.R.M.I.E.T.) (Jan'13 – August'16)
Physics Faculty**

**Institute of Banking Services(I.B.S), Chandigarh (April'12 - Dec'12)
Development Manager**

**Central Scientific Instruments Organization (CSIO), Chandigarh (March'08 – March'12)
Project Assistant (Bio-Medical Instrumentation Unit)**

Key Deliverables

- Designing and developing Prototypes Modules.
- Writing code for the developed Prototypes.
- Testing & troubleshooting of both hardware and software.
- Conducting Literature Surveys for ongoing research projects.

EDUCATION

- Completed **M. Tech.** with specialization in **Instrumentation Engineering** from Panjab University, Chandigarh in 2007 with **69%**.
- Completed **M. Sc.** with specialization in **Physics** from Guru Nanak Dev University, Amritsar in 2005 with 57.7%.
- Completed **PGDCA.** from Panjab University, Chandigarh in 2003 with **72.3%**.
- Completed **B. Sc.** in **Non-Medical(Physics, chemistry, Maths)** from Panjab University, Chandigarh in 2002 with **62.05%**.
- Completed Higher Secondary School from C.B.S.E. in 1999 with **71%**.
- Completed 10 from C.B.S.E. in 1997 with 66.6%.

PROJECTS HANDLED

Project # 1

Project Title	Design & Development of WIRELESS SPEED CONTROL SYSTEM of DC motor
Description	The project involved design & development of circuit communicating two ZigBee modules. Speed of the motor is entered through the keyboard and this value is sent through Zigbee to other Zigbee module which is connected to microcontroller whose output drives the motor.

Project # 2

Project Title	Interfacing of Touch Panel module with Micro Controller
Description	The project involved design & development of electronic circuit connecting Touch Panel module with ADuC 842 kit and then displaying its value on LCD which is connected through parallel ports of the kit.

Project # 3

Project Title	Design & Development of Wheel Chair Movement using Joy Stick
Description	The project involved design & development of electronic circuit connecting Joy Stick module with DC motor. Movement of Joy Stick is controlling the speed and direction of the motor using microcontroller AT89C2051.

Project # 4

Project Title	Interfacing of different module with ARM 7
Description	The project involved design & development of electronic circuit interfacing ADC with ADuC 7026 and displaying its value on LCD. Generating different wave form using DAC module of the kit.

Project # 5

Project Title	Design & Development of flow controller to ANESTHESIA VENTILATOR (AV)
Description	To control the flow using a pneumatic valve that can give any intermediate value between ON and OFF value, also using amplifier and ADC. For generating this we used ADC interfaced with microcontroller through ADuC842.

Project # 6

Project Title	Design & Development of MICROCONTROLLER BASED TOTAL BLOOD PROTEIN ANALYSIS
Duration	Nov 2006 to May 2007 (M. Tech Thesis)
Description	The project involved design & development of electronic circuit and algorithm development; consists of development of module for the calculation of protein in blood using 8052 microcontroller interfaced with LCD and ADC using C language.

TECHNICAL SKILLS

Controller	:	ARM 7, 8051 Microcontroller Kit
Programming Board	:	ADuC 7026, ADuC 842
Protocols	:	I2C, SPI, RS 232, UART
Programming Languages	:	C,C++, Assembly Language (8051)
Tools	:	Keil µVision, Ayala, Orcade

WORKSHOP & SEMINARS

- Attended National Conference on Emerging Medical Instrumentation(CEMI-2010) held in CSIO in March11-12 2010
- Attended National Conference on Advanced Materials and Technology, organised by Post Graduate Department of Physics and Electronics, DAV College Amritsar, on Sep. 24-26, 2004.
- Attended National Conference Cum Workshop on Solid State Nuclear Track Detector and Application, organised by Post Graduate Department of Physics and Electronics, DAV College Amritsar, on Nov.1-3, 2004.

PERSONAL DETAILS

Date of Birth : 9th August, 1982
Languages : English, Hindi & Punjabi
Location Preference : Any where in India

REFERENCES

Dr. Amod kumar

Scientist 'G' & Head
(Bio-Medical Instrumentation Unit)
Central Scientific Instruments Organisation(CSIO)
Sector 30 C, Chandigarh
0172-2637492
csioamod@yahoo.com
www.csio.res.in

Mr. Sanjeev Kumar

Scientist 'B'
(Bio-Medical Instrumentation Unit)
Central Scientific Instruments Organisation(CSIO)
Sector 30 C, Chandigarh
0172-2657811-228
virdi205@gmail.com
www.csio.res.in