# Abhimanyu Kumar

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| Examination | Institute | Year | CGPA / % |
|---|---|---|---|
| B.Tech. (CSE) | IIT Mandi | 2009-13 | 7.56/10 |
| Intermediate/+2 | T.P.S. College patna (Bihar Board) | 2008 | 70% |
| Matriculation | N.M. High school Gangaur (Bihar Board) | 2006 | 78% |

## ACADEMIC PROFILE

## EXPERIENCE

**Scientist, DRDO | Hyderabad**                                    **Since Aug 2013**
*Design,Development and Testing of Inertial Navigation System Software for Garuthma Missile*
- Designed and developed a calibration scheme for modelling the gyroscope measurement for better accuracy of the strategic missiles.
- Implemented hybrid navigation filter which takes input as GPS position, INS Gyros and Accelerometers output and gives output with better Position accuracy.
- Developed scheme for testing INS software over the library (Written in C) provided by DDC which supports 1553B communication protocol.

## INTERNSHIPS

**1. Navyug Infosolutions Pvt. Ltd. | Noida, India**                **[Jan - Feb 2013]**
*Patients Details management system Android App*
- Developed android app using **Vuforia augmented reality** SDK for text recognition on the medicine tablet to ease the medicine management of patients.
- Ensured the confidentiality of the individual patients details.

**2. Nucleus Software Exports Pvt. Ltd. | Noida, India**            **[June - July 2012]**
*Emotions manipulation system using NLP paradigm on social media data*
- Developed data parser for analysing the Facebook post for deriving the sentiments of the individual.
- Skills & tools used - Stanford Corenlp library, Web-service, java, MySql.

**3. Financial Software System Pvt. Ltd. | Noida, India**          **[Dec 2011 - Jan 2012]**
*Web Forum Portal*
- Designed and Implemented web based forum portal to enable the person to build a network from around the world and discuss innovative and creative ideas.
- Skills & tools used - PHP Symfony Framework, HTML, CSS, MySQL

## ACADEMIC PROJECTS

**1. Online AI Competition Judge**                                 **[Feb - May 2013]**

- Project involved developing an application that **accepts bots**, **conduct matches** between them and ranked them based on the results of the matches.
- Created **sandboxing** to prevent the server from malicious code.

2. **Game Development** [Feb - May 2012]
- Development of the Educational game for the primary school student.
- Students have to answer the states name based on geographical location and regional songs.
- Skills & tools used : C++, **OpenGL library**, Blender

3. **OpenNMS customisation to monitor the Facebook status** [April - May 2012]
- Added features in network monitoring tool (**OpenNMS**) to monitor the Facebook notification along with its existing features of network monitoring.
- Developed graphical user interface to enrich the usability for the end users.
- Skills & tools used : Perl, Python, HTML, CSS, MySql, XML

4. **National unique id Database Application** [Feb - April 2011]
- Design and development of the scalable database application for storing users record and auto switching of servers in case of lookup request.
- Skills & tools used : Perl, PHP, MySql, HTML, Javascript

5. **End to end bandwidth measuring tool** [Feb - May 2011]
- Implemented BST algorithm in bandwidth measuring tool **pathload** to improve the delay in bandwidth measurements.
- Enhancing the probe pattern weakness based on the delay time of the previous packet.

6. **Wheel chair operated by sound** [Jan - May 2011]
- Designed a voice operated wheel chair to minimise the efforts of the physically disabled people.
- studied in-details the mechanical-electrical interface and implemented the functionality between micro-controller and electrical motors.
- Skills & tools used : Embedded-C, speech recognition kit, Electric motor.

7. **Online Application form for the MS/PhD students** [Aug - Dec 2010]
- Designed a web portal through **PHP**, **HTML**, **CSS**, **JavaScript** to minimise the application process efforts and promoting the e-service and reducing paper work.
- Used **MySQL** for data storage purpose.

## SKILLS
**Language :** C, C++, Embedded C, Python. Bash shell, Basics of Java, PHP, HTML
**Operating Systems :** Ubuntu, Windows 8/7/vista, MS DOS
**Others :** Eclipse, MATLAB, Visual Studio, VDSP

## ACADEMIC ACCOLADES
- Lead the Athlete group of IIT Mandi in **46th** & **47th** inter IIT sports meet.
- Awarded by honourable chief minister of Bihar for performance in **Super-30**.
- Awarded by **Merit cum Means** scholarship during 1st, 2nd, 3rd and 4th year.
- Co-coordinator NSS Education cell.