

# ABHIMANYU TAK

Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT)  
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DOB: July 17, 1992

AREA OF INTERESTS Computer Graphics, 3D Games/Simulation, Software Development, High Performance Computing, Free and Open Source Software and Embedded Systems.

EDUCATION **DA-IICT, Gandhinagar, Gujarat, India** 2011-15  
B.Tech in Information and Communication Technology **GPA: 7.0/10.0**

**DAV Public School, Kota, Rajasthan** 2009-10  
HSC, CBSE **Percentage: 77.00**

**Mayoor School, Ajmer, Rajasthan** 2007-08  
SSC, CBSE **Percentage: 87.40**

TECHNICAL SKILLS

- *Programming Languages:* Python, C++, C, CUDA, SQL.
- *Graphics and Game Dev:* OpenGL, GLSL, Unity3D, Flash.
- *IDEs:* CodeBlocks, Visual Studio, Eclipse, Canopy.
- *Web Technologies:* HTML5, CSS3, Bootstrap API.
- *Embedded Programming:* AVR, Arduino.
- *Version Control:* Git, Mercurial.
- *Designing:* GIMP, Photoshop.

EXPERIENCE **Google Summer of Code** (May'15 - Present)  
**Copyleft Games**  
Implementing a procedural terrain generation engine for PySoy, an open source cloud gaming engine.

**Research Internship** (January'15 - April'15)  
**DA-IICT**  
Mentor : Dr. Bhaskar Chaudhury  
Implemented a heterogeneous parallel code using CUDA and GPGPU for investigation of electromagnetic waves in plasma medium based on FDTD technique.

**Industrial Internship** (May'14 - June'14)  
**Defence Research & Development Organization**  
Mentor : Dr. Rajesh Kumar, Sc 'F'  
Created a Virtual Scene Simulation Software using Unity3D which simulated a drill done during a hazardous attack to quarantine the hazard zone.

**Rural Internship** (December'12)  
**Foundation for Ecological Society**  
Mentor : Ms. Pratiti Priyadarshini  
Did topological survey of villages and mapped the resources, landmarks and village boundary with the help of GPS, Garmin MapSource and Google maps.

PROJECTS **BFS Implementation in CUDA** (October'14 - November'14)  
Mentor : Dr. Bhaskar Chaudhury (Team - 1)  
Implemented a multithreaded parallel code for Breadth First Search for achieving better performance over serial code.

**Hobby Bar** (February'14 - April'14)  
 Mentor : Prof. Pranav Joshi (Team - 10)  
 Developed a website under the Software Engineering course on pursuing and discovering new hobbies. The website was built using web framework called Meteor.

**Portable Blood Group Detector** (February'14 - April'14)  
 Mentor : Dr. Amit Sengupta (Team - 5)  
 Developed a portable system using image processing techniques to detect the blood type of a person which gives quick results and can be installed in any ambulance for emergency purpose.

**Database - Real Estate** (August'13 - November'13)  
 Mentor : Dr. Minal Bhise (Team - 2)  
 Designed a database for Real Estates under DBMS course, derived ER model, mapped to a relational database schema and normalized it. Wrote SQL queries on the database and in the last phase worked upon a GUI interface for insert, delete and update.

**FB-Gmail Notifier** (August'13 - September'13)  
 Mentor : Dr. Rahul Dubey (Team - 4)  
 A Python script was written to get notification from Facebook and Gmail account. The script serially sends the notification to Arduino which in turn shows the message on two seven segment LEDs.

**AWARDS AND ACHIEVEMENTS**

- Got selected for **Google Summer of Code 2015** as a student developer for Copyleft Games.
- Won 3rd prize in Line Seguidor(Line follower bot) in Ignus'15, IIT Jodhpur.
- Won 1st prize in I-Database in IFest'14 organized by IEEE Student Branch, DAIICT.
- Won 2nd prize at NIFT's annual festival Spectrum'13 for performing street play.
- Won the most active club member award for EHC at Annual Felicitation Ceremony 2013, DAIICT.

**POSITIONS OF RESPONSIBILITY**

- Convener, Electronics Hobby Center, DAIICT. (July'14 - April'15)
- Organizing Committee Member, Annual Festival Synapse, DAIICT. (August'13 - March'14)
- Resource and Event Manager, Electronics Hobby Center, DAIICT (February'13 - April'14)
- Coordinator of event I-Electro, I-Fest, DAIICT. (October'13 - November'13)

**COURSES**

**Computer Science** - Data Structures and Algorithms, Computer Graphics, GPU Programming, Animation, System Software, DBMS, Models of Computation, Operating Systems, Computer Organization, Computer Networks.

**Electronics** - Digital Logic Design, Analog Circuits, Embedded Hardware Design, Medical Electronics, Introduction to VLSI.

**Mathematics** - Probability and Statistics, Discrete Maths, Algebra, Calculus.

**HOBBIES** Playing Guitar, Reading, Event Management.

**LINKS**

Website: [abhimanyutak.github.io](http://abhimanyutak.github.io)  
 Github: [github.com/abhimanyutak](https://github.com/abhimanyutak)