

# Shubhajit Saha

## Work Experience

**SDE III** at Agricx  
*Jan 2018 to Present*  
**CEO & Founder** at Rhyme Tek.  
*Jun 2016 to Dec 2017*  
**Sr Project Technical Assistant** at IDC, IIT Bombay  
*Sep 2014 to Mar 2015*  
**Design Assistant** at IDC, IIT Bombay  
*Oct 2013 to Sep 2014*  
**Jr Technical Assistant** at IDC, IIT Bombay  
*Jan 2013 to Sep 2013*  
**Jr Gameplay Programmer** at Ubisoft, Pune  
*Oct 2011 to Dec 2012*

## Education

**Bachelor of Engineering in Civil Engineering**, Bengal Engineering and Science University, Shibpur.  
*2007 to 2011, Percentage: 68.4%, First Class (semester wise 71.9, 75.8, 66.9, 66.9, 69.7, 62.4, 67.7, 66.6)*  
**Senior Secondary**, Indian School Certificate.  
*2005 to 2007, Marias' Day School, Howrah. Percentage: 86.6%*  
**Secondary Education**, Indian Council of Secondary Examination.  
*1995 to 2005, St. Aloysius' Orphanage and Day School, Howrah. Percentage: 78.4%*

## Awards and Achievements

Winner of *First Pitch 2013*, Eureka IITB.  
Atooms to Moolecules included in *NASSCOM GDC 2012*.  
Won *Intel Level Up 2011* in Educational Category.  
Published Atooms to Moolecules on *Steam* as a part of Intel Level Up Demo.  
Game Demo showed at *Electronic Entertainment Expo (E3)* edition of Video Games Live.  
Won Windows Phone 7 "*I Unlock Joy*" program in Student Category by Microsoft.  
Won "*Build Your Dreams with Windows Phone 7*" Applications contest – India 2011 by Microsoft.  
Certified and Published five game titles on *Windows Phone Marketplace*.  
First in GameX (Game Design Competition), *Tryst 2011* (IIT Delhi Techfest).  
Second in Demo Project *Tryst 2011* (IIT Delhi Techfest).  
Third in GameX (Game Design Competition), *Tryst 2011* (IIT Delhi Techfest).  
First in Envision, Ingenuity (Open Software Design), *Troika 2011* Delhi Technological University (IEEE Student Branch).  
Second in AppsDreamer *Synapse 2011* (DAIICT, Gandhinagar).  
First in OpenSoft *Kshitij 2011* (IIT Kharagpur Techfest).  
Second best prize in *BITM Eastern India Science and Engineering Fair*, with Undergraduate Scholarship for a year.  
Invited to compete in *INFOCOM (Kolkata)*, in Feb 2011.  
First in Software Designing *Bits2Bytes 2010* (BIT, Techno India).  
Rank of 192 (38th in India) during summer 2009, SPOJ. SPOJ has 250,000+ participants from 125 countries.  
5<sup>th</sup> in *Flawless Edge 2009* (Techno India), where around 200 teams participated.  
Maximum *TopCoder* Rating of 1076 (Green member) during summer 2009.  
Ranked 1248 (top 0.5%) in *WBJEE*, state engineering admission exam, 2007.  
State Rank of 732 (500,000+ applicants) in *AIEEE*, national engineering admission exam, 2007.

## Technical Clubs and Association

Co-Founder of BitSits Games.  
Volunteer for CRY-BESU Chapter (Child Rights and You).

## Publications

S. Saha, G. Paul. **On effective Sharing of User Generated Content**. *In the Proceedings of ACM APCHI 2013*. Bengaluru, India. 2013.

M. Agarwal, S. Saha. **Interactive Entertainment Software for Learning chemistry**, *In the Proceedings of Grace Hopper Celebration of Women in Computing India*. Bangalore, India. 2012.

M. Agarwal, S. Saha. **Environment Educational Game Design**, *In the Proceedings of Grace Hopper Celebration of Women in Computing India*. Bangalore, India. 2011.

S. Saha, M. Agarwal. **Learning Chemistry through Puzzle Based Game: Atoms to Molecule**, *In the Proceedings of the 9th IEEE International Conference on Emerging eLearning Technologies and Applications 2011*. StaraLesna, Slovakia. 2011.

S. Saha, M. Agarwal. **Atooms to Moolecule (Game Design Abstract)**, *In the Proceedings of SPAC TRIGGER Vol. 24 Delhi Technological University (IEEE Student Branch)*. Delhi, India. 2011.

## Conferences & Invited Workshops

July 2013, *Monsoon HCI Course by Anirudha Joshi*, IIT Bombay.

Nov 2012, *NAASCOM Game Developer Conference*. Pune, India.

Jun 2012, *Electronic Entertainment Expo (E3)*, Los Angeles Convention Center, USA.

Dec 2011, *Grace Hopper Celebration of Women in Computing India*. Bangalore, India.

Feb 2011, *Students' Professional Awareness Conference (SPAC)*. Delhi Technological University, Delhi, India.

Jan 2011, *Speaker of Game Design Lecture in BIT, Techno India*. Kolkata, India.

## Skill Set

**Operating Systems:** Windows, GNU/Linux.

**Programming Languages:** C#, C, C++, Java.

**API/Frameworks:** OpenGL, DirectX 9, XNA (3.0, 4.0), WP7 Dev Tool, .NET (2.0, 3.5), Windows API.

**Web Technologies:** PHP, HTML, XML, JavaScript, CSS, Silverlight, CodeIgniter

**Graphics Editors:** Adobe Illustrator, Adobe Photoshop.

**Audio/Video Editors:** NCH WavePad, Adobe Premiere, Microsoft Expression Encoder 3.

## Projects

### Nazariya.co.in

In this world of digital art and 3D printing, Nazariya is a movement to bring us closer to the beautiful world of Indian Folk Art. Partnered in building digital assets website, store, and blog.

### Wavez.in

Wavez is the desire to remove all the barriers for live music from large events to small in-house parties. The love and passion for music have motivated us to transform our idea of "connecting artists" into reality. Partnered in building digital assets website.

### Rime (Ongoing)

Create a unified platform which will bring together users fragmented data and information. The idea is to integrate all popular web services and create a unique experience.

### Creating Digital-learning Environment for Design in India (e-kalpa) 09MHRD019

Advisor: Ravi Poovaiah

Design Assistant Oct 2013 – Sep 2014

Sr. Project Technical Assistant Sep 2014 – Mar 2015

### Development of Robust Document Image Analysis & Recognition System for Printed Indian Scripts (OCR Consortium Project Phase – 2) 10DIT013

Advisor: Anirudha Joshi

Junior Technical Assistant Jan – Sep 2013

### Squares Vs Triangles 2: War Again (Ongoing, Role: Mentor)

The game is based on 4-day prototype game *Squares Vs Triangles*. The gameplay is changed to a simple platformer with additional features like multiplayer (4v4), more classes of weapons and new objectives.

### Cops and Robbers with Multiplicity (Advisor: Goutam Paul)

Analyze the 'cops and robbers' game with the modification to the game rule that even cops are vulnerable, multiple robbers are present and multiple cops can sit in a single grid. The objective was to find the multiplicity of the cops required to catch all the robbers, where multiplicity is the number of cops that can be placed in a single grid.

#### **Application of GIS in Rural Road and Habitation Mapping (Team size - 2)**

Advisor: Prof. Sujata Biswas (Undergraduate Thesis, Bengal Engineering and Science University, Shibpur)

Develop habitation database and rural road network database at a block level. Identify the unconnected habitation in the block and the growth center based on socio-economic parameters.

#### **Squares Vs Triangles**

An RTS game inspired by Jon Klassen's art *squarestrianglesatsea.jpg* and *shapewarsweb2.jpg*. The game was developed for Experimental Gameplay Projects - Night and Day for November.

Windows Phone Marketplace Product ID: 93c6c586-2773-e011-81d2-78e7d1fa76f8

#### **Atooms To Moolecules (Team size - 2)**

A chemistry-based puzzle game, drag and drop to connect the atomic creature and make molecules. The game was made as an Independent Game Festival 2011 entry. It won Intel Level Up 2011, Educational Category.

Windows Phone Marketplace Product ID: 40dd71d3-fb57-4afb-9d44-95b24d57024d

Steam Marketplace ID: <http://store.steampowered.com/app/213390/>

#### **Push Puzzle**

A puzzle game where the player taps to slide the puzzle blocks in the correct order to their corresponding place to solve the puzzle. This game was developed for Experimental Gameplay - The April theme Wash, Rinse and REPEAT.

Windows Phone Marketplace Product ID: df14a58e-935c-e011-854c-00237de2db9e

#### **BitSits Framework**

Microsoft® XNA and .NET based game engine developed for rapid prototyping. It runs on multiple platforms (Windows and Windows Phone 7). It also supports Erin Catto's Box2D physics engine under the MIT License.

#### **Gombli (Team size - 2)**

A single player platformer game, the game character Gombli is an 11-year-old girl. Gombli fights pollutants (Carbon dioxide and Chlorofluorocarbon) and solves puzzles on her quest. The game was made as an entry in Imagine Cup Game Design Competition 2010 Round 1.

## **Prototypes**

#### **Rubik's Cube Solver**

The solver uses *Korf's algorithm* also called IDA\*. The implementation is similar to JappScherphuis's Cubie. The cube can be solved with a maximum depth of 25.

#### **Sign Line (Team size - 2)**

In the game, the player solves the puzzle by joining the same kind of symbols. The player can join the symbols either linearly or by making loops. The game was made as an entry in Imagine Cup Game Design Competition 2011 Round 1.

Windows Phone Marketplace Product ID: b7b7f1fd-ca18-4030-8281-2f6a0eed63d0

#### **Treasure Island**

A game made in 48 hrs made for Ludum Dare #19 competition. In the game, you collect as many treasure chest as you can and find the cross mark to go to the next level. To move to the next island use the boat. The game was also submitted in Experimental Gameplay Projects - December DRAWING.

Windows Phone Marketplace Product ID: 8d73dd02-c8b7-4f52-8725-9394006a8333

#### **Moolecule**

A game about connecting the atomic creatures to make bigger and bigger molecules. The game was developed for Experimental Gameplay Projects - Two Months of CASUAL ADDICTION for June and July.

#### **Apple e Apple**

In the game, you have to grow an apple tree and lots of apples before you collect all the arrows. The game was developed for Experimental Gameplay Projects - Two Months of CASUAL ADDICTION for June and July.

#### **Speedy Crash**

Physics-based game where you are trapped in an endless asteroid belt, where you crash into them using your velocity. This game was developed for Experimental Gameplay Projects - The May theme May means HIGH VELOCITY.

## References

**Dr. Goutam Paul**

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**Dr. Sujata Biswas**

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**Dr. Ravi Poovaiah**

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**Gaurav Singh**

Senior PS3 Programmer  
Ubisoft, Pune.  
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