# Apoorv Umang Saxena

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github.com/apoorvumang

## **Educational Qualifications**

Examination/Degree	Institute	Year	% marks
PhD Candidate, Department of Computation and Data Sciences (CDS)	Indian Institute of Science, Bangalore	2018-present	
BE (Hons.) Computer Science	BITS, Pilani	2011-2015	8.60/10
Class XII - PCM + Computer Science (CBSE Board)	Springdales School DK, New Delhi	2011	91.4%
Class X (CBSE Board)	Springdales School DK, New Delhi	2009	96%

# **Experience**

# Google, Hyderabad

Software Engineer 3 — May 2016 - Mar 2017

Software Engineer in the Tools and Infrastructure of Google Apps for Work (now rebranded as GSuite).

# PayPal, Chennai

Software Engineer 1 — July 2015 - November 2015

Part of the Reporting team at PayPal. Working on migrating mid-tier Java services to a new intra-PayPal framework. This involves working with Java EE and PayPal's relational databases.

## Flipkart, Bangalore

PS-2 Intern — Jan 2015 - July 2015

Worked in the E-kart team at Flipkart and helped develop a Master Data Management system.

#### EdgeVerve, Bangalore

Summer Intern — May 2014 - July 2014

Summer intern at EdgeVerve, a 100% owned subsidiary of Infosys. Worked in team DigitizeEdge, which is an enterprise product for development of mobile applications.

#### Summer Intern

Bhabha Atomic Research Centre, Mumbai — Summer 2013

Summer intern at BARC for 10 weeks during May - July 2013. Did project titled 'Ascertaining bubble size distribution in immiscible liquid flows' which required development of image processing techniques for automating bubble size estimation in chemical flows.

# **Projects**

# Member, Team Acyut

BITS, Pilani — August 2011 - 2013

Part of team Acyut which is a humanoid robotics project sponsored by Department of Electronics and Information Technology, Government of India.

#### Accomplishments

- Implemented image processing and robot localisation modules
- Represented India in Robocup IranOpen 2012 and 2013

Represented India and stood 4th in Robocup 2013 held in Netherlands

# Swarm Robotics - Implementing Testbed Using e-puck Robots

BITS, Pilani — August 2013 - July 2014

Project under Professor Avinash Gautam for testing swarm algorithms and validating simulation results. Have tested certain solutions to the circle formation problem. The work led to a paper that was published in the IC3 2014. Paper Github

# **Interest Level Detection Using Webcam**

BITS, Pilani — August 2013 - December 2013

Software project for detecting user's interest level based on facial features. Done as part of course Artificial Intelligence. Github

# Music Genre and Artist Classification Using Lyrics

BITS, Pilani — January 2013 - May 2013

Software project for music classification using supervised learning. Done as part of course Machine Learning under Professor Navneet Goyal.

# **Extracurricular Projects**

# Vaccine Scheduling and Patient Database Management System Summer 2012

Wrote vaccine scheduling software for paediatricians that has been in active use and development for over 3 years. Github

#### Skills

- Programming Production level code in C, C++ and Java. Have developed in Qt.
- Web Development Angular, Node, HTML, PHP.
- Hardware AVR Microcontrollers, Arduino boards, Raspberry Pi.
- Designing Software Adobe Photoshop, Basics of Autodesk Inventor

#### **Achievements**

- 2nd Position in robotics event Interceptor, Techfest 2013, IIT Bombay
- 2nd Position in image processing event Polaroid, Techfest 2014, IIT Bombay
- 2nd Position in Image Processing event Istrike, Apogee 2013, BITS Pilani
- 1st Position in DesertHack 2012, BITS Pilani, for application Kiri (source code available on github)
- 1st Position in Web Development event, CodeStorm 2011, BITS Pilani
- 5th Position in CSI Young Talent Search in Computer Programming, 2011
- Awarded BITS Merit scholarship for semesters 1-4 for being in the top 1% of current batch

#### **Publications**

Gautam, A., Saxena, A. U., Mall, P., & Mohan, S. (2014, August). Positioning multiple mobile robots for geometric pattern formation: An empirical analysis. In *Contemporary Computing (IC3)*, 2014 Seventh International Conference on (pp. 607-612). IEEE.

# Positions of Responsibility

School prefect for 2 years between 2009-2011