Utkarsh Agarwal

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Educational Qualifications

Year	Degree	Institution	CPI/Percentage
2017(Expected)	Bachelor of Technology	Indian Institute of Technology, Kanpur	9.4*/10
2013	AISSCE(CBSE 12th)	DAV Public School, Kota	92.4
2011	AISSE(CBSE 10th)	Mayoor School, Ajmer	10/10

*At the beginning of the fifth semester

Scholastic Achievements

- Secured All India Rank (AIR) **132** (top 0.09%) in **IIT Joint Entrance Examination (JEE) 2013**

- Selected to appear in **INJSO, 2010; INAO(Jr.), 2010** and **INChO, 2013**: National Olympiads conducted by HBCSE, India for being amongst the **top 300 in India**.

- Amongst the **top 100** out of 1000 selected from all over India for **NTSE Scholarship, 2009**: a prestigious scholarship funded by NCERT, Delhi.

- Awarded a certificate for being the amongst the **top 1 percentile in India** in NSEP.

- Awarded Merit Certificate by CBSE for securing **10/10 CGPA** in 10th class.

Professional Experience

- Summer Internship at Altisource Business Solutions Pvt. Ltd., Bengaluru
  (Networking Department)   (May-July, 2015)

  - Project CHEF
    Objective: To automate configuration management of the organisation

    * Automation of application installation and customisation was achieved with the features of easy customisation of software version, software configuration, etc.
    * Any error encountered while installation or any major update was automatically reported
    * Inventory management with reporting of key parameters like IP address, CPU count, memory, storage, etc. was automated
    * The scripts to achieve above were written in DSL of CHEF
    * The above was done for a cluster of hundred nodes
    * Time and cost for building, upgrading and repairing infrastructure was significantly brought down

  - Project Graphite
    Objective: To report server parameters through graphs using Graphite

    * Installation of Graphite and its components Carbon and Whisper was done on a server
    * Graphite was configured with setting retention periods using regex, configuring database
    * Python scripting was done to input data into Carbon which involved data parsing and socket programming
    * Testing with large data was done
    * Real time monitoring of a scalable infrastructure was achieved
    * The graphs helped in easy auditing of multiple machines by monitoring crucial parameters

Projects

- Scotland Yard Computer Game
  (Under Programming Club, IITK)   (May-June, 2014)

    – Designed GUI of the game using Pygame library in Python

    – Used Graph Theory to link the map of the city with a graph for use in AI

    – Wrote the AI of the game using Minimax Algorithm in Python

    – Used sockets library to extend it to a Multiplayer Version that can be played on LAN

Relevant Courses

Grades mentioned in parentheses and ongoing courses are marked with #

Data Structure and Algorithms (A*)	Introduction to Computer Organisation (A)
Operating Systems #	Theory of Computation #
Computing Laboratory (A)	Discrete Mathematics (A)
Fundamentals of Computing (A)	Probability and Statistics (B)

Technical Skills

- Programming Languages: C, C++, Python

- OS: Windows, Linux

- Tools: CHEF, Graphite

- Other: Git, Latex, Bash Scripting, Octave, Verilog, Assembly

Extra-Curricular Achievements

- Programming

    – Enthusiastic Competitive Programmer

- English Literary Activities / Debating / Oration

    – Stood 1st in Galaxy, an Intra IITK cultural fest

    – Adjudged Best Debater in Middle and Senior Section in School

    – Represented School in various Inter School Debate Competitions

- Tennis

    – Stood 2nd in Freshers' Inferno, an Intra IITK sports fest

    – U-17 School Tennis Team Captain

- Member of Alumni Contact Program(ACP), IITK : A programme aimed at improving Alumni Relations

Positions of Responsibility

- Senior Executive, Public Relations, Antaragni14

    – Invited eminent personalities in for Antaragni

    – Helped in managing events and looked after the guests

- Academic Mentor

    – Academic Mentor of ESC101 to 1st year students