Shubham Aggarwal

Interests

- Data Structures and Algorithms
- Machine Learning
- Big Data Analysis
- Application Development
- Ontology Web Language

Education

2011–2016 **B.Tech + M.Tech(Integrated M.Tech) in Information Technology**, *Indian Institute of Information Technology and Management*, Gwalior, *GPA – 7.95/10*.

2011 **Senior School Certificate Examination**, *Central Board of Secondary Education*, Delhi, *91.33 % (PCM)*.

2009 **Secondary School Examination**, *Central Board of Secondary Education*, Delhi, *90.80 %*.

Undergraduate Thesis

Title ***A Futuristic Approach to Intelligent Life Cycle Costing using Ontology Web Language***

Supervisors Professor Anupam Shukla & Associate Professor Pankaj Shrivastava

Description

- Designed a Semantically enabled methodology for Product Life Cycle Cost analysis using Ontology Web Language
- Studied state of art Life Cycle Costing, Ontolgy Models and Tools.
- An ontology structure for a desired product is constructed from previously existing ontologies for that domain and adding new ontologies using Ontology Web Language.
- Then the created owl file is parsed using Java OWL API to develop a prototype solution for semantic modelling of the LCC Estimation
- Ontology structures are such developed so that they can be reused for a variety of products belonging to the same domain.
- Graph Visualization of Ontologies is done using Protege Development Environment.
- The graphical representation helps in comparing and analyzing LCC of various different products under the same domain.

Experience

Internships

July 2013-December 2013 **Open Source Learning Project Core Contributor**, SANFOUNDRY, Bangalore.
Six Months long internship in Data Structures and Algorithms.
Rated "Exceeds Expectation" during the course of Internship.

- Implemented Data Structures and Algorithms in C++ as a part of Open Source Learning Project by Sanfoundry
- Worked on optimizations of algorithms- hamiltonian cycle, convex hull, dijkstra, all pair shortest path etc.
- Worked on implementation of data structures- linked list, map, hash, heap, fibonacci heap, trees, graphs etc.

December 2012-May 2013 **Summer Training**, DUCAT INDIA, Gwalior.
- Learned about Java Classes and Oops Implementation, packages and interfaces, Exception handling.
- Made Swing Applications using Java Applet during Training Period.
- Learned about Networking and Multi-Threaded Programming in Java and Developed a chat application.
- Also learned about using JDBC, J2EE components and services, Java Servlet Pages (JSP) and developed an ecommerce web application using JSP.

Academic/ Key Projects

2013 **An Online Comprehensive Crime Reporting System**.
Course Project in System Analysis and Design under guidance of Dr. Anurag Srivastava
- Implemented a Crime Reporting System to engage public, police and government agencies to be more quick, proactive and responsive to fight with crimes and criminals.
- The system was built using PHP and MySql.
- A registered user can add compalaint, view complaint status, edit complaint and chat.
- An administrator can view and reply user complaints, add/delete most wanted, missing persons, add or view FIR etc.

2013 **An Online Virtual Programming Environment**.
Course Project in Information Technology under guidance of Dr. Anurag Srivastava
- Developed an online Virtual Programming Platform which can host programming contests worldwide, trainings and events for programmers.
- The system was built on J2EE platform using JDBC, Servlets, JSP and Java Mail.
- A registered user can solve a question, participate in live contests, edit account, comment on a question
- An administrator can add new questions, host contests, upload tutorials etc.

Computer skills

Languages	C, C++(Advanced), Java,Pyhton(Intermediate), C#,OWL(Basic)
Web Technologies	HTML5, Bootstrap, JavaEE, PHP5, JS, XML(Intermediate), Angular, CSS3, JSON, PhoneGap, Wordpress, Drupal (Basic)
Databases	MySql - Oracle(Intermediate), JDBC, MS Access
IDEś	Netbeans, Eclipse, PyDev, Apache Tomcat, Git, Visual Studio(Intermediate)
OS	Linux (Ubuntu, Fedeora, Mint, Monarch), Windows

ABV-Indian Institute of Information Technology and Management – Gwalior
+917694966929 • *shubham.iiitm.11@gmail.com*
LinkedIn Profile   *2/3*

Achievements and Awards

2014   **2nd Runner Up** Globally in Target Hiring Challenge held up at Hacker Earth.

2013   **Regionalist**, ACM International Collegiate Programming Contest Amritapuri Regionals 2013.

2013   **Winner** of La Ingenious (Overnight Software Designing Contest) in Infotsav 2013, Annual Technical festival of ABV-IIITM.

2013   **Finalist** at Web Mania (Website Designing Contest) in Infotsav 2013, Annual Technical festival of ABV-IIITM.

2013   **Globally Ranked 19th** in CodeRush, a Programming Contest on HackerEarth

2012   **Teaching Assistant** for Networking at AASF - Abhigyan Abhikaushalam Students Forum @ IIITM Gwalior

2011   **Winner** Sports Quiz under aegis of AASF - Abhigyan Abhikaushalam Students Forum @ IIITM Gwalior.

Relevant Courses @ IIITM Gwalior

Engineering Mathematics I-II, Computer Programming, Probablity and Statistics, Data Structures, OOPS, Data Communication, Digital Logic & Design, Computer Architechture, DBMS, Computer Networks, Control Systems, Mircroprocessor Based System Design, Compuer Graphics, Operating Systems, Design and Analysis of Algorihtms, Software Engineering, Wireless Communication Technologies, Artificial Intelligence, Modelling and Simulation, Internet Security

Position of Responsiblities

2014   **Placement Representative**, Batch 2011-2016, IIITM Gwalior.

2014   **Event Head**, Corna-Battle of Bands, Aurora, Annual Cultural Fest @ IIITM Gwalior.

2013   **Events Manager**, Infotsav, Annual Technical Fest @ IIITM Gwalior.

2013   **Event Head**, Witch Hunt-The Debugging Contest, Infotsav - 2013

Hobbies

- Writing Articles, Poems, Stories   - Cryptography, Puzzle Making/Solving

- Quora Addict   - Cooking

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