

# CURRICULUM VITAE

**Smt. Amrita Chaturvedi**

PhD. Scholar,  
Room No CS 106,  
Department of Computer Science & Engineering,  
Indian Institute of Technology,  
Kanpur, Uttar Pradesh, India.



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## Address

Amrita Chaturvedi

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## 1. Carrer Objective

Doing research in computer science and engineering in highly reputed institutes/universities that harness technical skills, strengthen innate capabilities and provide a sound learning and scientific environment while being resourceful and flexible.

## 2. Academic Qualification

1. PhD in Computer Science and Engineering, Indian Institute of Technology, Kanpur, 2014.
2. M.Tech in Information Technology with specialization in Software Engineering, Indian Institute of Information Technology, Allahabad (Deemed University), 2007.
3. B.Tech. in Information Technology, Institute of Engineering and Technology, Lucknow, 2004.

## 3. Working Experience

1. **Indian Institute of Technology, Kanpur, India.** PhD Research Scholar/Teaching Assistant, January 2008 – Present; Senior Project Associate, September 2007 – December 2007
2. **Vrije University, Amsterdam, The Netherlands.** PhD Research Scholar/Teaching Assistant, April 2009 – October 2009.
3. **Indian Institute of Information Technology, Allahabad, India.** M.Tech. Scholar/Teaching Assistant, July 2005 – July 2007.
4. **Institute of Engineering and Technology, Lucknow.** Visiting/Guest faculty, August 2004 – July 2005.

5. **Nucleus Software Exports Limited, Noida, India.** Software Engineer Trainee, July 2004.

#### 4. Area of Specialization

Software Engineering, Software Architecture, Software Design Patterns, Ontologies.

#### 5. Research Interests

Software Architecture and Design, Ontologies based Software Engineering, Service Oriented and Model driven Architecture, Semantic Web and Internet Technologies, Mobile Agents

#### 6. Publications

##### Conference

- Amrita Chaturvedi, Prabhakar T.V.: Ontology - driven mvc: A variant of mvc architectural style. In: Proceedings of the International Conference on Software Engineering and New Technologies (ICSENT'2012), Hammamet, Tunisia. (December 2012) 158 - 174 (**Best Paper Award**).
- Amrita Chaturvedi, Prabhakar T.V.: Ontological visitor pattern. In: Proceedings of Indian Conference on Patterns and Pattern Languages of Programs (GuruPLoP 2013), Bangalore, India. (March 2013).
- Amrita Chaturvedi, Prabhakar T.V.: Ontology driven observer pattern. In: International Workshop on Ontologies meet Advanced Information Systems (OAIIS 2013) in conjunction with 17<sup>th</sup> East-European Conference on Advances in Databases and Information Systems (ADBIS 2013), Springer International Publishing Switzerland, Genova, Italy. (September 2013) 307 – 316.
- Amrita Chaturvedi, Prabhakar T.V.: Ontology driven creational design pattern – creating objects on the fly. In: Proceedings of International Conference on Reliable and Convergent Systems (ACM RACS 2013), ACM Press, Montreal, Canada. (October 2013) 312 – 321.
- Amrita Chaturvedi, Prabhakar T.V.: Ontology driven builder pattern – a plug and play component. In: The 29<sup>th</sup> ACM Symposium on Applied Computing (ACM SAC 2014), ACM Press, Gyeongju, Korea. (March 2014).

##### Journal

- Amrita Chaturvedi, Prabhakar T.V.: Ontology driven creational design patterns as reusable components. In: ACM Applied Computing Review Journal, ACM Press, 14, 1 (2014).

## **Book Chapter**

- Amrita Chaturvedi, Prabhakar T.V.: Ontology - driven mvc: A variant of mvc architectural style. Book chapter in Business Intelligence and Mobile Technology Research: An Information Engineering Perspective, ed. by Sean Eom (Cambridge Scholars Publishing).

## **Technical Report**

- Amrita Chaturvedi, Prabhakar T.V.: Domain Ontology Based MVC and Its Quality Attribute Implication, Indian Institute of Technology Kanpur, 2010.

## **7. Awards/Achievements**

- ACM SIGAPP Award 2014.
- Best Paper Award for my research paper with Dr. T. V. Prabhakar (Professor, Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur) titled as “Ontology – Driven MVC: A Variant of MVC Architectural Style” published in the proceedings of International Conference on Software Engineering and New Technologies (ICSSENT 2012) held in December 2012 in Hammamet, Tunisia.
- Selected as the first female student from Asia under EURECA (European Research and Educational Collaboration with Asia) project 2009 to conduct research at Vrije University, Amsterdam, The Netherlands for 6 months.
- Qualified GATE 2005 with percentile score of 96.16.
- Selected in Physics Olympiad conducted by Indian Association of Physics Teachers, 1999.

## **8. Seminars/Talks**

- “Ontology Driven Patterns for Software Architecture” in Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur, India on 23 July 2014.
- “Ontology Driven Builder Pattern – A Plug and Play Component” in 29<sup>th</sup> ACM Symposium on Applied Computing (ACM SAC 2014), Gyeongju, Korea on 27 March 2014.
- “Design Patterns” for CS455 Course (Introduction to Software Engineering) in Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur, India on 12 November 2013.
- “Effect of Ontology in Patterns for Software Architecture” for CS654 Course (Software Architecture) in Department of Computer Science and Engineering, Indian Institute of Technology, Kanpur, India on 12 March 2013.
- “Semantic Technologies and Software Architecture” in Indian Institute of Technology, Kanpur on 27 November 2009.

- “Roles of Semantic Components in Software Engineering” in Software Architecture meeting held under the supervision of Dr. Hans Van Vliet and Dr. Patricia Lago, Professors, Department of Information Management and Software Engineering (IMSE), Vrije University, Amsterdam, The Netherlands on 06 October 2009.
- “Roles of Semantic Components in Software Engineering” in semantic web meeting held under the supervision of Dr. Frank Van Harmelen, Professor, CS Department, Vrije University, Amsterdam, The Netherlands on 28 September 2009 (URL: [http://tripletalk.cs.vu.nl/index.php/Semantic\\_Web\\_Meetings\\_schedule](http://tripletalk.cs.vu.nl/index.php/Semantic_Web_Meetings_schedule)).

## 9. Services

- Research paper reviewer, International Symposium on Networks, Computers and Communications 2014 (ISNCC 2014), Hammamet, Tunisia.
- Research paper reviewer, International Conference on Advanced Information Technologies and Applications 2014 (ICAITA 2014), Dubai, UAE.
- Research paper reviewer, International Conference on Reliable and Convergent Systems 2014 (ACM RACS 2014), Towson, MD, USA.
- Webmaster, Website of Workshop on Knowledge Representation in Software Engineering in Practice (KRSEP’14) co-located with Seventh India Software Engineering Conference (ISEC’14), February 19 – 21, 2014, Chennai, India. (<https://sites.google.com/site/krsep2014/>)
- Research paper reviewer, International Conference on Cloud Computing and Big Data 2013 (CloudCom – Asia), FuZhou, China.
- Session chair of Security track, International Conference on Reliable and Convergent Systems 2013 (ACM RACS 2013), Montreal, Canada.
- Research paper reviewer, International Conference on Reliable and Convergent Systems 2013 (ACM RACS 2013), Montreal, Canada.
- Research paper reviewer, International Conference on Information Systems and Technologies 2013 (ICIST 2013), Tangier, Morocco.
- Volunteer, India Software Engineering Conference 2012 (ISEC’2012) held at Indian Institute of Technology, Kanpur in 22-25 February 2012.

## 10. Memberships

- Member of Association for Computing Machinery (ACM) and Special Interest Group on Applied Computing (SIGAPP).
- Member of ACM's Committee on Women in Computing (ACM - W).

- Life member of Indian Science Congress Association.
- Program committee member of International Conference on Reliable and Convergent Systems 2014 (ACM RACS 2014), Towson, MD, USA.
- Program committee member of International Conference on Software Engineering and New Technologies 2014 (ICSENT 2014), Hammamet, Tunisia.
- Program committee member of International Conference on Software Engineering and New Technologies 2013 (ICSENT 2013), Hammamet, Tunisia.
- Program committee member of International Conference on Information Systems and Technologies 2013 (ICIST 2013), Tangier, Morocco.
- Program committee member of International Conference on Reliable and Convergent Systems 2013 (ACM RACS 2013), Montreal, Canada.

## 11. Computer skills

- **Programming Languages :** C, C++, Java.
- **Client Side technologies:** HTML, javascript, java, ajax.
- **Server Side technologies:** PHP, java.
- **Modelling Languages:** Unified Modelling Language (UML), Java Modelling Language (JML), RDF, OWL.
- **Database technologies:** Oracle, MySQL, XML, db4o.
- **Operating Systems:** Windows, Linux.
- **Development Environment:** Netbeans, Eclipse, Oracle SQL Developer, Rational Rose, liferay.
- **Web Application framework:** Ruby on Rails, spring.
- **Knowledge Representation Tools:** Concept Maps, Protégé.
- **Testing Tools:** Jameleon

## 12. Projects Undertaken

1. **Title** → Analyzing Komli adserver training data and designing click-rate improving algorithm; **Team Size** → 1; **Duration** → 2 months; **Software** → SVM (support vector machine) of libsvm, MySQL, GNUPlot.
2. **Title** → Sentiment Analyzer for automatic evaluation of customer feedback ; **Team Size** → 2; **Duration** → 4 months; **Software** → J2SDK (Java 2 Software Development Kit), db4o (object oriented database), SVM (support vector machine) of SVMLite.

3. **Title** → Architectural Framework for Rapidly Developing Agile and Evolutionary Information Systems Involving Mobile Agents; **Team Size** → 1; **Duration** → 1 year; **Software** → ASDK (Aglet Software Development Kit), J2SDK (Java 2 Software Development Kit), Oracle 9i.
4. **Title** → Website Testing using a open source testing tool; **Team Size** → 1; **Duration** → 1 month; **Software** → Jameleon (open source testing tool).
5. **Title** → Hospital Management System; **Team Size** → 19; **Duration** → 6 months; **Software** → Java Swings, Oracle 9i.
6. **Title** → Hospital Management System; **Team Size** → 2; **Duration** → 1 month; **Software** → Visual Basic, Oracle 9i.
7. **Title** → Simulate and Comparative Study of RED Congestion Algorithm and TCP's Window Management Using Uniform Random Variables; **Team Size** → 2; **Duration** → 1 year; **Software** → Linux, NS simulator.

### **13. Declaration**

I hereby declare that the information furnished above is true to the best of my knowledge.

Place: Kanpur

**(Amrita Chaturvedi)**