Ayesha Choudhary

CONTACT

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Indian Institute of Technology Delhi,
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EDUCATION

Indian Institute of Technology Delhi, New Delhi

Research Scholar
Department of Computer Science and Engineering, July 2003 - till date

- CGPA: 9.0/10.
- Research Area: **Activity Recognition and Visual Surveillance**
- Supervisors: **Prof. Subhashis Banerjee** (Dept. of Comp. Sc. & Engg.) and **Prof. Santanu Chaudhury** (Dept. of Elec. Engg.).

Indian Institute of Technology Delhi, New Delhi

M.Tech. Computer Applications
Department of Mathematics, December 2001.

- CGPA: 8.579/10
- Project Title: **Computation of Euclidean Parameters from Projective Reconstruction.**
- Supervisors: **Prof. J. B. Srivastava** (Dept. of Mathematics) and **Prof. Subhashis Banerjee** (Dept. of Comp. Sc. & Engg.).

Indian Institute of Technology Delhi, New Delhi

M.Sc. Mathematics
Department of Mathematics, May 2000.

- CGPA: 9.032/10.
- Project Title: **Linear Programming and Matrix Games in Fuzzy Environment**
- Supervisors: **Prof. Suresh Chandra** (Dept. of Mathematics) and **Dr. Wagish Shukla** (Dept. of Mathematics).

Delhi University, New Delhi

B.A (Honors) Mathematics
Kamala Nehru College, July 1998.

- Percentage: 77.

RESEARCH INTERESTS

Computer Vision, Machine Learning, Image Processing, Linear Algebra, Optimization, Computer Graphics.

PUBLICATIONS

1 "*Unsual Activity Analysis using Video Epitomes and pLSA*", Ayesha Choudhary, Manish Pal, Subhashis Banerjee, Santanu Chaudhury, ICVGIP 2008.

2 "*A Framework for Analysis of Surveillance Videos*", Ayesha Choudhary, Santanu Chaudhury, Subhashis Banerjee, ICVGIP 2008.

3 "*Unusual Activity Analysis in Video Sequences*", Ayesha Choudhary, Santanu Chaudhury, Subhashis Banerjee, In Proc. RSFDGrC 2007, (LNAI 4482), pages 443-450, Toronto, Canada, May 2007.

Academic Experience

Indian Institute of Technology Delhi, New Delhi

Teaching Assistant
Department of Computer Science and Engineering

1 Numerical and Scientific Computing (CSL361), July 2008 - December 2008, Prof. Subhashis Banerjee.

2 Computer Graphics(CS474/CS781), January 2008 - May 2008, Dr. Subodh Kumar.

3 Digital Image Processing (CSL783), July 2007 - June 2007, Prof. K. K. Biswas.

4 Introduction to Computer Science(CSL201), January 2007 - May 2007, Dr. Amit Kumar .

5 Digital Image Processing (CS783), July 2006 - December 2006, Prof. Prem Kalra.

6 Computer Graphics(CS474/CS781), January 2006 - May 2006, Prof. Prem Kalra.

7 Numerical and Scientific Computing (CSL361), July 2005 - December 2005, Prof. Subhashis Banerjee.

8 Introduction to Computer Science(CSL101), May 2005 - July 2005, Dr. Neelima Gupta.

9 Introduction to Computer Science(CSL101), January 2005 - May 2005, Prof. B.N Jain.

10 Introduction to Computer Science(CSL101), July 2004 - December 2004, Prof. Subhashis Banerjee.

11 Numerical and Scientific Computing(CSL361), Jan 2004 - July 2004, Dr. Dheeraj Bharadwaj.

12 Supercomputing for Engineering Applications, July 2003 - Dec 2003, Dr. Dheeraj Bharadwaj.

Department of Mathematics

1 Algebraic Geometry, July 2001 - Dec 2001, Prof. J. B. Srivastava.

2 C++, July 2000 - July 2001, Dr. Raj Ahuja.

Professional Experience

Associate Technology, Sapient Corporation (India)
I worked in Sapient as a software engineer from February 2002 till August 2002.
The roles played were those of Developer, Tester and Bug-fixer.

Consultant, Mantra Virtual Services Pvt. Ltd.
I worked in Mantra as a software consultant from September 2002 till June 2003.
The roles played were those of Designer, Developer and Trainer.

Computer Courses	Algorithm Analysis and Design, Operating Systems, Data Structures, File Systems, Database Management Systems, Computer Vision, Computer Graphics, Computer Networks, Computer System Software, Computer Architecture, Advanced Computer Graphics, Digital Image Processing, Pattern Recognition, Theory of Computation, Pattern Recognition and Machine Learning.
Mathematics Courses	Real Analysis, Complex Analysis, Linear Algebra, Topology, Functional Analysis, Group Theory, Ring Theory, Projective Geometry, Algebraic Geometry, Differential Equations, Partial Differential Equations, Discrete Mathematics, Numerical Optimization, Operations Research, Fuzzy logic and its Applications, Probability and Statistical Inference, Numerical Methods for Scientific Computing.
Accomplishments	**First** rank in **B.A. (Honors) Mathematics**, 1998. **Second** rank in **MSc. Mathematics**(2000) and in **M.Tech Computer Applications** (2002). **Qualified CSIR-UGC JRF-NET** examination held in Dec 1999. Received **CSIR-UGC Junior Research Fellowship in M.Tech (C.A)** July 2000-Dec 2001. Qualified **GATE 2000 in Mathematics** with an All India Rank of **152**. Received **Certificates of Excellence** in **Undergraduate Mathematics Olympiad** held in Delhi in 1997 and 1998.
Extracurricular Activities	Done proficiency level course in **Spanish (86%)** from July to December 2005. Done proficiency level courses in **Japanese (A+)** and **French (A)** from July to December, 2001. Attended **Workshop in Mathematics** held at Department of Mathematics, IIT Delhi, in October 1996 and 1997. Green-1 belt in Tae Kwon Do.
Skills	**Languages**: English, Hindi and beginner level French, Spanish and Japanese. **Programming Languages**: C, C++, C#, JAVA, FORTRAN77 and PL/SQL. **Other Technologies**: OpenCV, Matlab, Gnuplot, HTML, ASP, ASP.NET, StarOffice and MSOffice. **Operating Systems**: Unix, Linux and Windows(2000/XP/NT).