OPPORTUNITIES @ CSA

Research Areas

**Theoretical Computer Science**
- Algorithms, Algorithmic Algebra, Random Projections,
- Graph Theory, Combinatorial Geometry, Cryptology,
- Coding Theory, Computational Geometry, Logic,
- Computational Topology, Formal Verification.

**Computer Systems**
- Computer Architecture, Multi-core Systems,
- Parallelization, Embedded Systems,
- Energy Aware Computing, Compilers,
- Operating Systems, Storage Systems,
- Database Systems, Distributed Computing,
- Cloud Computing, Systems Security, Mobile and Wireless Systems, Cyber-Physical Systems,
- Performance Modeling, Graphics, Visualization,
- Program Analysis, Software Engineering.

**Intelligent Systems**
- Pattern Recognition, Machine Learning, Data Mining,
- Convex optimization, Information Retrieval,
- Graphical Models, Soft Computing, Bioinformatics,
- Social Network Analysis, Network Science,
- Reinforcement Learning, Stochastic Control and Optimization, Stochastic Simulation, e-Commerce,
- Game Theory, Auctions and Mechanism Design,
- Cognitive Systems.

Research Labs
- Algorithmic Algebra Lab
- Algorithms and Verification Lab
- Compilers Lab
- Computer Architecture Lab (SERC)
- Computer Architecture and Systems Lab
- Database Systems Lab (SERC)
- Distributed Computing Lab
- Electronic Commerce Lab
- High Performance Computing Lab (SERC)
- Informatics Lab
- Machine Learning Lab
- Microprocessor Applications Lab (CEDT)
- Programming Languages Lab
- Stochastic Systems Lab
- Visualization and Graphics Lab

PhD
CSA’s Doctoral Program has 82 students and has produced India’s finest computer science researchers over the years.

MSc (Engg)
CSA’s MSc (Engineering) program has 36 students and offers an attractive research intensive program for BE/BTech/MSc graduates.

ME (CSE)
CSA’s ME program in Computer Science and Engineering is the number #1ME program in computer science in India and has a strong research focus.

ME (SSA)
CSA and the Department of Electrical Engineering of IISc offer a unique ME program in Systems Science and Automation (SSA) which has all the rigorous ingredients for contemporary trends in Computer Science and Automation.

ERP (Research)
CSA offers an External Registration Program to pursue PhD-open to employees of R&D organizations, Global Companies and Engineering College Teachers.

QIP (Research, Master’s)
CSA offers to engineering college teachers seats in its PhD and Master’s programs under the Quality Improvement Program.

Summer Internships
CSA has a summer internship program sponsored by the UGC.

Join CSA and explore the frontiers of Computer Science and Automation!

Department of Computer Science and Automation
Indian Institute of Science, Bangalore, India

For more details: [http://www.csa.iisc.ernet.in](http://www.csa.iisc.ernet.in)