

SANDEEP K.T.

Control and Computing lab – II
Department of Electrical Engineering
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EDUCATION

Year	Course/Examination	Institution	Performance
2011 - present	PhD student in Electrical Engineering	IIT Bombay	CPI 8.13/10
2006 - 2010	B.Tech in Electrical Engineering	NIT Warangal	CPI 8.52/10
2006	AISSCE(XII) CBSE	AECS Kaiga	90.0 %
2004	AISSE(X) CBSE	AECS Kaiga	93.0 %

WORK EXPERIENCE

- 2010 – 2011 : Faculty of Mathematics, IIT-JEE division, T.I.M.E. Pvt. Ltd. Cochin

ACADEMIC ACHIEVEMENTS

- Awarded the Institute merit scholarship for exceptional academic performance during first year of B.Tech.
- Secured 11th rank in Karnataka Regional Mathematics Olympiad-2004 and participated in Indian National Mathematics Olympiad.
- Awarded the prestigious National Talent Search Scholarship (NTSE), 2004 by NCERT, New Delhi.
- Awarded the Certificate of Merit in AISSCE (XII) by CBSE for being in the top 0.1 % of all students appearing for the examination in Mathematics.

RESEARCH PROJECTS

- *Development of better circuit simulators through Topological hybrid analysis*

Guide: Dr. N. Subrahmanyam

Undergraduate Thesis
Dept. of Electrical Engineering
NIT Warangal

Studied the topological hybrid method for solving a network by adopting an approach to transform the network into another with a different topology (and same devices), but with additional inputs and constraints. Different algorithms for minimizing the number of constraints involved while partitioning the circuits were developed and their time complexity were compared.

- *Mathematical modeling and simulation of the Advanced Heavy Water reactor*

Guide: Dr. A.P.Tiwari

Summer Internship '08
Reactor Control Division
BARC Mumbai

Developed a mathematical model of the reactor starting from the basic point kinetic model and then a nodal model. Several nodalization schemes were evolved and analyzed for characterizing the stability, controllability and observability of the reactor core in the best possible manner. The feasibility of using a SCADA package like LabVIEW for simulation was tested by integrating a point kinetic neutronic model and reactor regulating system model.

RELEVANT COURSES

- Nonlinear dynamical systems
- Optimal Control
- Multivariable control
- Basic algebra
- Integer programming

PROGRAMMING SKILLS

- Languages: C/C++
- Operating System: Windows
- MATLAB, LabVIEW
- LaTeX

EXTRACURRICULAR ACTIVITIES

Technical Activities

- Won 1st position in Inter AECS Science Exhibition 2004 held at AECS, Tarapur.
- Received special applause for a project exhibiting the essentials of the theory of Relativity to the general audience in Hyderabad.

Quizzes

- Secured top positions in several Science and Technical quizzes in school and college.

Other Interests

- Won several prizes in Elocution, Essay writing, Creative poetry in school.
- Trained and motivated several juniors in school for Olympiads and NTSE.

DECLARATION

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

Sandeep K.T.

August 2012

Mumbai