

# GURSHARANJIT SINGH

## EDUCATION

| Course                      | Year                 | Institute  |
|-----------------------------|----------------------|--|
| Ph.D. Aerospace Engineering | Started January-2011 | Queen Mary-University of London                  |
| B. E. (Hons.) Mechanical    | 2005-2009            | BITS-Pilani, Pilani                              |
| AISSCE (Class XII)          | 2005                 | G. G. N. Public School, Ludhiana<br>(CBSE Board) |
| AISSE (Class X)             | 2003                 | G. G. N. Public School, Ludhiana<br>(CBSE Board) |

## PHD PROJECT

- Investigation of flow coupling between low pressure steam turbine last stage & diffuser.
  - The flow at the exhaust of the steam turbines is two phase, highly 3D & contains all possible aerodynamic losses. Much of the detailed understanding in this area is still unknown & the project aims to gather more understanding using computational studies of the flow physics with 3D unsteady N-S solver. This will be done in conjunction with the available industrial data.

## PROFESSIONAL

Mechanical Design Engineer, **Alstom Power**, Rugby, UK Dec '09-Nov'10

- Worked on various projects covering aerodynamic concept development, design & testing of steam turbine blades & exhaust systems.

## INTERNSHIPS

Intern, **Mechanical Engineering Research & Development Organization**, Ludhiana, India Sept '09-Oct-'09

- Worked on CAM tools for few case studies.

Project Trainee, **TVS Motor Company Ltd**, Hosur, India July '08 - December '08

- Worked on the development of algorithm for automobile plant production planning.

Summer Intern, **Chambal Fertilizers & Chemicals Ltd**, Kota, India May '07 - July '07

- Studied condition monitoring on turbo-machines.

## ACADEMIC PROJECTS

- Study of various Online Tool Condition Monitoring Techniques for CNC Machines
- 3-D Simulation & Analysis of various manufacturing units using Value Stream Analysis in 3D-tool to reduce Inventory & WIP levels

## ACHIEVEMENTS

- High-School topper, held positions at regional physics/maths Olympiads & various athletic meets
- School Head Boy & Founding member/Chairperson of ASME students' chapter BITS-Pilani.

## OTHER INFORMATION

- Programming experience in C, Fortran, CNC parts