

# NARASIMHA SHASTRI

---

## Objective:

A career in Engineering Research, Design, Development or Application, contributing to the field of **Fluid Dynamics** in the best possible way and achieve great heights in innovation and technology.

## Work Experience:

- **Application Engineer**, MICO-BOSCH, Bangalore, India, Jan 2002 –Dec 2002. Responsible for Application work on Diesel Fuel Injection Equipment. Optimization of Engine and FIE parameters for Emission and Performance.

- **Research Intern**, Temasek Laboratories, Singapore, May 2003- July 2003. Design and analysis of modified aeronautical wings using commercial CFD preprocessor, solver, post-processor package MGAERO.

## Educational Qualification:

Jan 2003 – Present    **Master of Science, Mechanical Engineering**  
Major: **Computation and Modeling**  
**National University of Singapore**  
GPA: 3.88/5.00 (Completion expected by December 2003.)

Sep 1997 – Sep 2001    **Bachelor of Engineering**  
Major: **Mechanical Engineering**  
**The National Institute of Engineering,**  
**University of Mysore, India.**  
Aggregate: 73.15 %

## Proficiency:

Knowledge areas	: Fluid Dynamics, CFD, Reactive Flows, Flow Instabilities, Euler Solvers, Multigrid Solvers, Diesel Fuel Injection, IC engines.
Programming Languages	: C, FORTRAN, MATLAB.
Platforms	: WINDOWS, Linux.
CFD Package	: MGAERO.
Others	: MS-Office.

## Skill set:

- ❖ Experience in writing CFD codes for **Reactive flows** and other basic codes for Euler solvers, Natural convection, boundary layer flows etc.
- ❖ Experience in aero-component development with a commercial Multigrid Euler solver MGAERO.
- ❖ Presently taking a post-graduate course majoring in '**Computation and Modeling**' with special interest in **Computational Fluid Dynamics (CFD)**.
- ❖ Diesel Fuel Injection optimization for emission and performance.

## Reference:

**Dr. Tsai Her Mann**  
Principal Research Scientist,  
Temasek Laboratories,  
NUS, Singapore.  
E-mail: tslthm@nus.edu.sg

**Graduate Research work:****Multispecies detonation capturing using CESE method**

Pulse Detonation Engines (PDE) are envisaged as the next generation aerospace engines. Computationally predicting the phenomena involved in the PDE are challenging due to the numerically stiff chemical reaction terms in the governing equation. This project involves modeling chemically reactive flows in a PDE using various CFD schemes and projection methods.

**Undergraduate Project:****Study of effect of different curing methods on the static properties of Fiber reinforced polymers**

Fiber reinforced Polymers (FRP) are an important structural material in modern aero and automotive design. This project, executed under collaboration between NIE and NAL (National Aerospace Laboratories, India), studies the effect of different curing methods used on the static properties of the FRPs.

**Publication:**

Shastri, Narasimha and Nataraja, Aditya; *“Design of Experiments Based on Taguchi Techniques with particular reference to Fiber Reinforced Polymers.”* Presented at National Level Technical symposium at JNTUCE, Ananthpur, India. (1999)

**Co-Curricular Activities:**

- Recipient of National Talent Search Examination scholarship by Govt. of India.
- Recipient of Kannan Devan scholarship for Academic Excellence.
- Presented Radio Talks on AIR Mysore.
- Amateur singer with a junior level certificate in Carnatic Classical singing.
- Avid debater and quizzer in school and college.

**Personal Profile:**

Date of Birth : 12-06-1979  
Sex : Male  
Marital Status : Single  
Nationality : Indian  
Passport number : E0010433  
Languages known : Kannada, English , Hindi , German (Elementary).  
Hobbies : Photography, Reading, Singing, Astronomy

**Contact Address:**

Block 5 Dover Crescent,  
# 11-06, Singapore- 130005  
Contact No: +65-9102-4922  
E-Mail: shas3n@yahoo.co.in

**Permanent Address:**

'Laxmi Nivas', 11/11  
9th cross, Venkatapura,  
Koramangala 1st block  
Bangalore, India 560 034

I hereby declare that the above details given by me are true, correct and complete to the best of my knowledge.

Yours Sincerely,  
**Narasimha Shastri**

Place : **Singapore**  
Date : **November 24, 2003**