

# Curriculum Vitae

## Strengths:

- Strong advocate of orderliness and precision.
- Honest and open minded.
- Wish to attain and give 100 % in all endeavors.
- Enjoy shouldering responsibilities and collective ventures.
- Strongly believe in the axiom, "Urge yourself to surge high".



## Career Objectives:

I am seeking a design and development position that effectively utilizes my skills in Mechanical & Mechatronics Engineering and Computer software and my innate Managerial capabilities.

<b>Name</b>	:	Suraj Kiran G.N.
<b>Date of Birth</b>	:	16, August, 1980
<b>Sex</b>	:	Male
<b>Nationality</b>	:	Indian
<b>Languages</b>	:	English, German, Hindi, Kannada and Telugu.

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## Educational Qualifications: -

- Master of Science in Mechatronics, University of Siegen, NRW, Germany.  
*[Pursuing currently third semester with up-to-date GPA of 1.96].* **Oct 2002 -- Oct 2004**
  - Bachelors in Mechanical Engineering from Bangalore Institute of Technology, Bangalore, India.  
*[Graduated with First Class with Distinction (81%)].\** **1998 -- June 2002**
- \*Detailed Consolidated Marks Sheet of my Bachelor's Degree can be downloaded by following the link (<http://surajkirangn.tripod.com/backyard/id3.html>)

## Academic Achievements :

- Working with world-class researchers at **Institut für Werkstofftechnik (Chair of Materials Science and Testing)** ([Material Science Engg. Dept.](#)) from February 2003 under **Prof. Dr.-Ing. Habil. H.-J. Christ** on various projects in the Institution.
- Topped the University with an overall aggregate of 81% for 8 semesters in the branch of Mechanical Engineering during the period from 1998-2002.
- Topped the University during 2<sup>nd</sup>, 5<sup>th</sup> and 6<sup>th</sup> semesters.
- Scored highest percentages in numerous engineering subjects.

### **Undergraduate Dissertation / Project :**

***“Modeling, Static & Dynamic analysis and Rapid Prototyping of the Twin Switch Shroud and Rocker” at Advanced Product Design and Prototyping (APDAP) in Indian Institute of Science (IISc), Bangalore, India.***

### **Software Skills: -**

<i>Operating Systems</i>	: Windows 9X/NT4/2000/XP
<i>Mechanical Oriented Softwares</i>	: UNIGRAPHICS V17, AUTOCAD R14 & R2000
<i>Finite Element Packages</i>	: UG Structures V17, ANSYS V5.4
<i>Programming Languages</i>	: Visual Basic 5.0, MATLAB
<i>Simulation Tools</i>	: Simulink
<i>Graphics Packages</i>	: Adobe Photoshop 5.0 & CorelDraw
<i>Office Packages</i>	: Microsoft Office 9x & XP

### **Projects and Industrial Internships: -**

August to October 2003      **RITTAL GmbH & Co. KG**      Herborn, **Germany**

- Involved with the ***IT product management group*** working for a RITTAL-specific Computer Multi Control CMC-Top Concept which is an innovative new enclosure monitoring system which adapts perfectly to the industry environment
- Analyzed the working principles of the various units making up the CMC TC module such as the master unit, IO unit, Climate unit, Access unit and the Power control unit and built up software interfaces for the same.
- Was entirely responsible for the documentation of the manuals of CMC TC units along with the user manual for the CMC TC manager software module in English for international partners of RITTAL.

February & March 2003      **RITTAL GmbH & Co. KG**      Herborn, **Germany**

- Involved in the ***Industrial Enclosures Department*** for optimization of the assembly lines paving for an efficient production of the successful ***Rittal classics AE, KL and EB***.
- Major tasks involved the logistics and ergonomics of the material management and the calculation of the requirement of constituent parts for the manufacture and successful assembly of the Rittal classics ***AE, KL and EB enclosures***. \*\*

February to June 2002      **Advanced Product Design and Prototyping**      Bangalore, **India**

- Shortening of product life cycle has necessitated the adoption of new technology for virtual product development. ***“Rapid prototyping technology”*** results in reduction of primary constraints namely cost and time without affecting the quality of the product.
- The project involved modeling ***“Twin switch shroud and Rocker”***, to carry out static analysis and to produce the prototype of the twin switch shroud by the technique of Rapid prototyping. \*\*\*

March to May 2001      **Gas Turbine Research Enterprise (GTRE)**      Bangalore, **India**

#### ***Expert System for the use of Material Constitutive Equations for Orthotropic Composites.***

- The Expert System developed through this project provides useful information to design engineers engaged in the design development of engineering components and structures in different areas

reviewing the existing Material Constitutive Equations of Orthotropic Composite materials and computation of stresses and strains with the aid of material properties. The expert system developed could also provide useful information to design engineers engaged in the design development of engineering components and structures. \*\*\*

*\*\* More details can be seen or downloaded by following the link and looking under the title “Research Internships at companies abroad”. (<http://surajkirangn.tripod.com/backyard/id10.html>)*

*\*\*\* More details can be seen or downloaded by following the link and looking under the title “Projects in undergraduation”. (<http://surajkirangn.tripod.com/backyard/id10.html>)*

### **Industrial Trainings in India: -**

- Took up a study on COMPOSITES at Gas Turbine Research Establishment (GTRE) in Bangalore in 2001.
- Had practical training on Computer Assembling, Servicing & Troubleshooting at JETKING Hardware, Networking & Cyber Technology Institute in 2000.
- Took up training on Computer Business Applications at APTECH Computer Education Pvt Ltd. from 1998-1999.

### **Research Assistantships:**

*Feb 2003 – Currently working.*

**Institut für Werkstofftechnik (Chair of Materials Science and Testing),  
University of Siegen, Germany.**

*1. Characterization of High-Temperature Fatigue behavior of two gamma-based titanium aluminides (TiAl) under isothermal & thermo-mechanical conditions with special regard to environmental effects. \*\*\*\*\**

*2. Life Prediction considering the Effective Damage Mechanism. \*\*\*\*\**

- As part of a team, collaborating with PhD and research scientists on design and analysis of a clinical trial.
- Assisting with the preparation of specimens for various tests and carried out tests under different conditions of temperature and loading.
- Concentrating in the area of Thermo graphic testing of TiAl.

*October 2002 - January 2003*

**Institut für Regelung und Steuerungstechnik ( Institute of Control Engineering )  
Zentrum für Sensorsysteme ( ZESS )  
University of Siegen, Germany.**

*Development of a motor-driven tripod head for an automatic repositioning of a navigation system's camera beam. \*\*\*\*\**

- Was responsible for the construction of partial components for a surgical robot-led tool system with the Drafting software AutoCAD V14.

*January 2002 - June 2002*

**Bangalore Institute of Technology.  
Bangalore.**

*Kinematics and Dynamics of Robots (CAD / CAM and Robotics Laboratory)\*\*\*\*\**

- Offline programming of a Pick and Place Robotic arm using a robotic teach pendent with the help of VICTOR'S ASSEMBLY LANGUAGE 2.

- Calculate the forces and torques acting on a rigid body and decide the condition for the body to be in static equilibrium. Be able to compute how forces and torques at the joints of the robot are transmitted to the end effector.
- Calculate the forward kinematics of any serially connected open loop manipulator. Understand why multiple solutions and singularities arise for the inverse kinematics. Be able to use standard solutions for the inverse kinematics of manipulators.

\*\*\*\* More details can be seen or downloaded by following the link and looking under the title “**Research Assistantships in India and Germany**”. (<http://surajkirangn.tripod.com/backyard/id10.html>)

#### **Seminars and Papers Presented: -**

- “Use of Mechatronic Elements in Robot Control Systems” for ACUMEN - 02 held at Bangalore Institute of Technology, Bangalore.
- “Properties of orthotropic composites under In-plane loading” for COMPOSITES-01 at Gas Turbine Research Establishment, Bangalore.
- “Application of Machine Vision in Robot Sensor Systems” as a part of Robotics Orientation Programme held by the Visveswaraiah Technological University.

#### **Leadership Skills: -**

- Was the General Secretary of the Mechanical Engineers & Industrial Management Engineers Association of VTU for the Academic year 2000-2001 during my IIIrd year of Bachelors Degree
- Was the representative of Mech Engineering Department at the Placement and Training center for the recruitment of fresh engineers.
- Was the Class representative of my class of 97 students for the Academic year 1999-2000
- Was an Editor of the Departmental Newsletter “Mech Times” during 2000-2002.

#### **Language Tests Taken :**

- TOEFL: Score: 263/300.
- Grundstufe Eins und Zwei Zertifikat (German Language proficiency certificate) from MAX MUELLER BHAVAN (Branch of Goethe Instituts Munchen), Bangalore.
- Mittelstufe Eins Certificate from Lektorat, University Of Siegen, Germany.

#### **Hobbies & Interests :**

Cricket, Table-Tennis, Formula 1, Reading, Traveling, Music, Multi-lingual Movies and Browsing.

#### **Declaration :**

Hereby, I, Suraj Kiran G.N. declare that all the above information provided by me is true to my knowledge and belief.

Yours Sincerely,  
Suraj Kiran G.N.

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