

Sandeep Kumar

Room No 208,
Hostel Kapili, IIT Guwahati,
Assam - 781039, INDIA

Phone: +91-361-2690793
E-mail: sandyitg@yahoo.com
sandeep@iitg.ernet.in

OBJECTIVE To secure a full-time employment in software development or management in a competitive and challenging work environment leading to the growth of the company and enhancement of my professional skills.

EDUCATION

B.Tech (Computer Sc & Engg)	Indian Institute of Technology Guwahati	7.93/10
I.Sc (Class-XII)	St. Xavier's School, B.S.City	88/100
I.C.S.E (Class-X)	St. Xavier's School, B.S.City	91.6/100

SKILLS

Languages: C, C++, Java, SQL, VB, VC++, Intel (x86), Perl, PHP, JSP, HTML, LATEX, Tcl/Tk

Operating Systems: Linux (Redhat/Debian), UNIX (Solarix, HP-UX), Windows (98,2k,XP)

Libraries: OpenGL, ODBC/JDBC, Gtk/Qt

Simulators/Tools: Rational Rose, Nachos, NS-2, Xilinx, Jbuilder, Tomcat

Database: ORACLE, SQL, MS Access

FINAL YEAR DISSERTATION

Intelligent Agents on the web (continuation of Microsoft sponsored project in IITG)

The project aims at providing a user a better experience on the web better by helping him out in many things like searches, recently visited pages, etc by learning his profile. Finally it will be integrated with the desktop agent already developed in IITG as part of the project.

July,03 – April, 04

TECHNICAL WORK EXPERIENCE

Summer Intern at University of Western Cape, Cape Town, South Africa

Application of Reinforcement Learning Techniques in a 2 Vs 2 offensive soccer game (as part of the overall RoboCup project)

Hand Modeling CAD

May – July, 03

Summer Trainee at Bhabha Atomic Research Center, Mumbai, India

Developed algorithms for recognition of 3D geometrical objects from range data.

Designed efficient data structures and client/server systems for easy data exchange in-between Linux and Windows System for data generated by a robotic system.

May – July, 02

JUNIOR YEAR DISSERTATION

Study Evaluation and use of Microsoft's .NET Architecture (IITG and MSDN Academic Alliance)

The study consisted of an overview of MS .NET architecture as well a detailed study into the advancement of COM model in .NET, .NET Web Services, SOAP, Encryption and Security issues related to the .NET architecture and WS Reliable Messaging.

Jan – April, 03

MAJOR PROJECTS

- Developed Automatic Taxonomy Generation for web searches.
- Studied security issues in P2P applications and network.
- Developed a Tiny Pascal Compiler using Unix tools like lex and yacc.
- Simulated the behavior of a 3D cloth using the graphics libraries of OpenGL.
- Simulated various data transfer algorithms and analyzed their performance using NS-2.
- Added features like multithreading, multiprogramming, VM, file system, etc to the barebones kernel of Nachos.
- Designed and implemented a Tea Warehouse Database using SQL and JSP.
- Designed tables for record maintenance by the Sale & Purchase Dept. of IITG.
- Developed software for automation of our CSE Department as part of my Software Engineering course.
- Developed a software for online registration of students in a university as part as my software engineering course.
- Designed a 4-bit CPU similar to Intel 8086 as part of our Hardware Lab.
- Developed an editor similar to 'vim' as part of the Data Structures Course.
- Developed a game based on Assembly (x86) as part of our System Programming Course.

*Group Leader in all major group based projects.

AWARDS AND ACHIEVEMENTS

- Ranked within 1% of students who appeared in the prestigious IIT-JEE 2000
- A NTSE Scholar
- Successfully developed an software and organized the first Online Programming Contest of IIT Guwahati in Techniche 2002 (Annual Technical Festival of IIT Guwahati)
- Recipient of Rotary Youth Leadership Award
- Awarded Certificate of Appreciation by the Embassy of S. Korea in the essay competition "Korea as I know her".

RELEVANT COURSES

Introduction to Computing
Digital Logic & Circuit Design
Computer Organization & Arch.
Operating Systems
Formal Lang. & Automata
Theory of Computation
Computer & Network Security
Wireless Networks

Data Structures
Algorithms
Systems Programming
Data Communications
Compiler Design
Computer Graphics
Peripherals & Interfaces
VLSI System Design

Discrete Mathematics
Software Engineering
Databases
Programming Langs.
Computer Networks
Artificial Intelligence
Distributed Systems

REFERENCES

Available on request.

I hereby declare that the information furnished is correct to the best of my knowledge.

Sandeep Kumar

5/2/2004