

RESUME

Priyank Jain

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PERSONAL DETAILS

Name	Priyank Jain	Permanent Address	House no. 387 Sector – 7/A City -Faridabad PIN :121006 State – Haryana INDIA
Date of Birth	25 th Feb '1984		
Nationality	Indian		
Sex	Male		
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EDUCATION

Bachelor of Technology To be completed by April 2006	Institution Major C.P.I	Indian Institute of Technology, Guwahati Computer Science & Engineering 8.84 / 10.0 (After 4 th semester)
Class XII 2001	Board Percentage	Central Board Of Secondary Education 94.0 % (Mathematics & Physics)
Class X 1999	Board Percentage	Central Board Of Secondary Education 92.5 % (Mathematics & Science)

COMPUTER SKILLS

Programming Languages	C,C++, Java, Perl , Bash programming ,VHDL / Verilog , Assembly (x86) SQL / PL-SQL, Visual Basic.NET, ASP.Net, VC++, HTML & DHTML.
Operating Systems	DOS, Windows 9x & XP, Linux (RedHat, Debian).
Software Packages	Rational Rose, Visual Studio.NET 2003, MS Office 2003, Circuitmaker 2000, Xilinx Simulator, JBuilder, Borland /TC++.
Databases	Oracle 9i, SQL Server 2000, MySql, Microsoft Access.

PROJECTS UNDERTAKEN

Major Projects

Topic: NACH-OS, Enhancing an educational OS Kernel & running user programs on a MIPS-DEC simulator.

Guide: Prof. Gautam Barua

Description:

- Implementation of various Process Synchronization primitives like Semaphores, Conditional Variables etc. to write multithreaded programs and solving various process synchronization problems.
- Implementation of a Thread Safe FileSystem.
- Design of Virtual Memory using Demand Paging. The main memory is used as a cache for the secondary storage
- A scheduler was developed for NachOS which uses the Round Robin Paradigm thus making it a true Multiprogramming OS.

Topic: [Design and implementation of 8-bit CPU](#) with memory interfacing .

Guide: Dr.J.Deka

Description:

The main features of the project are:

- CISC based architecture design.
- Microprogramming logic using EPROMs.
- 8-bit Data & Address Bus.
- 8 –bit opcode.
- Instruction Set includes 17 instructions like call, return, load, store, jump, move, and arithmetic operations.
- Subroutine and Jump Support using Stack implementation.

Topic: Automation of Institute's Medical Section Using Rational Rose Software

Guide:

Dr. P.K.Das

Description:

- Rational Rose used to capture the schema along with other software engineering techniques.
- Through Software Requirement Services (SRS) for precise knowledge of requirements.
- RAD (Rapid Application Development) & Spiral Models of software development used for optimized efficiency.
- Windows based web application with frontend in JSP and backend MS-Access Database.
- Encryption system implemented providing security across network.
- Features included – Inventory , Message Boards, New Consignment management and other querying facilities.

Topic: Automation of Pay-Roll System of a private institution

Description:

- Web Application for storing and accessing salaries of employees of an industry.
- Automating tasks of bonus , increments and leave deductions etc.
- Developed in ASP.NET and Oracle 8 Personal Edition.
- Database architecture designed using ERDs and implemented using SQL *Plus.
- Tuning of database for optimizing efficiency.
- ASP used for storing, updation and accession of database over the network.

Topic: Game Simulation – Car Racing

Description:

- Developed the player's response program as a part of game simulation.
- Used A.I. programming techniques & probabilistic approach to comprehend the best possible moves for the car.
- Challenges included limited Vision of racing track, Speed Breakers, sudden potholes and collision with opponents.
- C++ programming language used for implementing the logic behind the wheels.

Topic:

Developing an **interpreter** for Random Access Machine program

Guide:

Dr. Santanu Chattopadhyay

Description:

- Random Access Machine included a memory, a program, an input file and an output file.
- Input and Output files consisted of sequence of values and were consumed and produced respectively by a operation in program.
- Memory consisted of variables accessed directly by program.
- Instruction set included read, write, jump and arithmetic operations and a corresponding interpreter was designed in C language for this Random Access Machine.

Minor Projects

- Development of a Unix/Linux based **bash shell prototype** in C using UNIX system calls. Shell had many facilities including Input/Output redirection (<, >), Piping (e.g. - ls | more) Asynchronous execution (&), Inbuilt commands like cd, echo, grep etc.
- Developed a **Text Editor** using doubly linked lists in C++ and "ncurses" library of UNIX to implement functionalities such as scrolling, yanking, searching, deleting .Editor supported C/C++ programs, acquired proficiency in pointer management.
- **Garage management** simulation - Simulated garage management using priority queue. Management of Car details and status check up. Track records of all cars maintained in separate data structure. Usage of stacks and queues in implementing various waiting lists.
- A circuit for Binary Multiplier (Hardware) under Dr.J.Deka, Department of CSE, IIT Guwahati Implemented by primitive hardware chips.
& a circuit for Frequency Counter (Hardware) under Dr.H.Namade , Dept. of ECE , IIT Guwahati Implemented using LM555 Timer, Comparator, Transistor and other electrical.

ACHIEVEMENTS & AWARDS RECEIVED

- Secured an All India Rank of 1212 in IIT-Joint Entrance Examination among 0.15 million candidates for admission to 7 IITs.
- Currently placed 6th in department (of 42) according to cumulative performance , and 4th in Dept. according to last year 's performance.
- Won Vashnav Samaj (An Independent Society) Academic Proficiency Award for the year 2002-2003.
- Won Scholar Badge Award for two consecutive years (Grade 11-12) in Delhi Public School, Faridabad for academic excellence .
- Won General Proficiency Awards for six consecutive years (Grade 5-10) for academic excellence in Carmel Convent School, Faridabad .
- Won many intra school sports awards for cricket, basketball and football etc.

EXTRA-CURRICULAR

- Member of Publicity committee of all annual festivals of IIT – Guwahati.
- Active participation in the literary and cultural events in the Institute.
- Active member of CSEA: The Computer Science Engineers Association, IIT Guwahati.
- Participated in group discussions on [modernist movement in 20th century](#).
- Gave talk on [MindSpa Process & Consciousness Technology](#).

HOBBIES

- I love reading Agatha Christie's and Jack Rowling's books very much.
- I am very adventurous and like to travel to new places and unknown places.
- I love music and enjoy listening to both jazz and pop very much.
- I enjoy playing outdoors games like cricket, basketball and soccer and have represented my school in these games many times; I also play indoor games like chess, badminton, scrabble etc.

REFERENCES

Prof. Sukumar Nandi
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