**Career Objective**

To constantly learn, get better at each step of work and life, apply the knowledge into useful output and positively contribute to the society.

**Education Credentials**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year(s)** | **Qualification – Degree / Diploma / Certificate** | **Board/University** | **College / Institute/ University** | **Percentage / CGPA** |
| 2014 - Present | B.Tech (Computer Science with Specialization in  Mainframe Technologies) | University of Petroleum and Energy Studies | School Of Computer Science Engineering | 2.76 |
| 2013 | XII | All India Senior School Certificate Examination(CBSE) | Paramount Academy, Muzaffarpur | 93% |
| 2011 | X | Indian Certificate Of Secondary Education(ICSE) | North Point Children’s School, Muzaffarpur | 90.4% |

**Academic/ Co-Curricular Achievements/Activities**

* Gold medal for performance in boards.
* Attended Workshop on Android Development.
* Attended Workshop on Ethical Hacking and Network Security.
* Cleared Round 1 of Master the Mainframe (IBM India) 16’.

**Extra-Curricular Achievements/Activities**

* Student Placement Representative, CS-MT (2014-2018).
* President (2017-current), CodeChef UPES Campus Chapter.
* Vice-President (2017) and HR Head (2016-2017), CodeChef UPES Campus Chapter.
* Established the chapter in first academic year.

**PROJECTS UNDERTAKEN**

**Summer Internship Project**

**Company** - Bhabha Atomic Research Centre

**Duration** – 22nd May ‘17 – 25th July ’17

**Key Skills** - Data Acquisition System, Graphical Programming, Network Protocols, Microprocessors

**Description** – Developing a completely functional interface to control the acquisition of data from the microprocessors linked with the machines for the ECR Ion Source Lab in the Accelerator and Pulse Power Division of BARC**.** Created several interfaces which work with the digital as well as analog data for the provided hardware, with the proper use of IEEE 754 convention. The graphical language used is the proprietary of National Instruments, USA known as LabView. Several networking protocols like Modbus, RS232, TCP/IP were used are used for proper communication among the devices and the software.

**Minor Project 1**

**Title - LEXICAL ANALYSER FOR NATURAL LANGUAGE PROCESSING**

**Mentor** - Dr. Ajay Prasad

**Duration** - August ’16 – December ‘16

**Description** – Lexical Analysis is the initial phase of a compiler and it is supposed to break down,

an input stream into recognizable lexemes and further group them into the token categorization they belong to. In this project, we performed lexical analysis on a natural language. The language selected was English and any sentence was broken down and termed in the form of the part of speech it belonged to. This helped in breaking down and understanding the meaning of the sentence. Further, its application can be expanded or narrowed down to any programming language, as the broken meaningful words can be computed to form a parse tree and required automata can be designed by the engine to process the instructions.

**Minor Project 2**

**Title** - **EFFICIENT DIGITAL STORAGE AND BACKUP USING RAID PRINCIPLES.**

**Mentor** - Dr. Monit Kapoor

**Duration** - January ’16 – May ‘17

**Description** - This project is a simulation of the RAID (Redundant Array of Independent Disks) technology used in the majority of modern Database Management Systems. The main goal here to study about the underlying concepts used in such methodology and suggest some of the improvements that certain flaws might require. The first level of the module consists of the RAID 1 with further modules expanding and improvising on the concept.

**Extra Projects**

**Java Rendering Engine (Ongoing)** – This is a project which aims at simulating real world in order to be supported by a game. This project implies advanced elements used in the LWJGL (Light Weight Java Gaming Library). The aim of this project was to brush up the basic elements required to build a 3D simulated world. This project implements a basic game engine with all the functions of a 3D game environment. Accomplished by using Java as the language of choice and OpenGL as the graphics library.

**Basic Games** – These are a set of basic games which can be considered as replicas of modern 2D games. LWJGL is used as the main rendering element in many of these while Swing (Java) is the primary element to render the UI. The main aim of building these mini projects was to learn the core of Java programming and understand the mathematical foundations used in gaming industry.

**Technical Skill Set**

* **Languages** - Java, C++,C, SQL, NI LabView, COBOL, REXX
* **Development Tools** - NetBeans, LabView IDE, Sublime, VI, Nano, Open COBOL, Vista TN3270(Mainframe) Emulator
* **Software Packages** - OpenGL, LWJGL, Latex, Galil Motion Controller Suite
* **Databases** – SQL
* **Operating Systems** – Fedora, Elementary OS, Windows
* **Hardware** – NI RIO 47300, NI MYRIO, Digital Motion Controllers, Microprocessors - 8085, 8051, Arduino.

**Extras**

* 1. Objective in nature
* Problem Solver
* Negotiator
* Adaptable to learn

**Personal Details**

Date of Birth (DD-MM-YYYY) : 13-05-1995

Father’s Name : Rupak Kumar

Mother’s Name : Ruby Sinha

Gender : Male

Category : General

Nationality : Indian

Mobility : Global

Home Town : Muzaffarpur, Bihar

Permanent Phone No. : +91-7060325313

Languages Known : English, Hindi

I declare that the details mentioned above are correct and true to the best of my knowledge.