

## STATEMENT OF PURPOSE

My father was a Computer Science Lecturer in a College. I still remember one day after school he called me and showed me the satellite view of our house and neighborhood using Google Earth. I was fascinated by this and was curious to know how it works; I have posed him with many questions. He told me any application can be built using programming languages. I started gaining interest in learning programming. He taught me C programming. Most of my Schooling went on writing basic programs. I love to find patterns in the problem and solve them using my analytical skills. Whenever I solved a problem I had a kind of happiness which is still present in me to this date. This was the genesis of my sustained interest in computers. My zeal to learn more made me to choose Computer Science as my university major. The versatility in Computer Science solidified my interest and exposed me to the enormous potential of this developing field.

**I have 5 years of working experience as a Software developer** and gained hands on knowledge. Now I want to get breadths of academic exposure along with some depth on few of the ground breaking technologies like Machine Learning by pursuing Masters in your elite university which will undoubtedly bestow on me the right attitude and assist me with the necessary principles of carrying out further research.

I tasted my first huge success in my 11<sup>th</sup> Standard in which I have secured 457/470 and stood **7<sup>th</sup> in State Level**. I have bagged many accomplishments thereafter. I got **2,760<sup>th</sup>** rank among 328,356 students who applied for engineering stream. This helped me to get into **Gayatri Vidya Parishad College of Engineering (GVP)** which is one of the premier institutes in Andhra Pradesh. I opted for Computer Science and Engineering which opened the gates of beautiful world to me. In this four-year course, I have acquired appreciable skills in **Calculus, Statistics, Probability, C, C++, JAVA, Operating Systems, Data structures and Algorithms**. Along with this I also familiarized myself with web technologies like **HTML, CSS, JavaScript and some of its frameworks**.

I believe putting my skills to use will make me think better to solve problems in real time. In my third year I got an opportunity to showcase my talent by conducting an event in Mathematics. I built a timed **“Math Quiz” application** using Java which will select 10 questions randomly from the pool of questions and winners will be evaluated based on the time as well as number of questions correctly answered. As part of final year project, I lead the team for building **“Online Forum”** application which resembles Quora. Here we enable user to create forums, post questions and write answers based on their interests. This project has many interesting components and developed using Python. We used file system to store data, sockets for communication and implemented cache to improve performance. While working on this project I have garnered many things like coming up with good design before implementation. How to break the problem into chunks, also came to know that team collaboration is secret ingredient for any successful project.

Another milestone in my journey is getting selected for **Mission R&D summer program** in my 3<sup>rd</sup> year. Selection process for this program involves several stages which tests our Programming skills, Perseverance, Problem Solving ability. I was one among 105 students who got selected from more than 5000 students from all colleges. I had undergone

40 days of hands-on **training in IIIT Hyderabad** on areas like Data Structures, Networking, Compiler Design, Operating System etc. My training has come to fruition when I have bagged an **internship offer from Kony India Private Limited**.

Based on the performance I was promoted to **FTE** within 4 months, which is **ahead of internship tenure** which is 6 months. I worked in Kony for 2.5 years as **Product developer**. During this time, I worked on building Sales and Retail Banking mobile, tablet and Desktop Web applications using Java Script, Kony tool in MVC framework. I wrote a Controller which will reduce the number of calls to services and database by caching the data. Apart from core work, I like to reduce the manual work. One day we got a requirement to change a flag in all the forms of our application which is a huge task, then I got an idea as these forms are maintained as JSON files internally. I wrote a small program to change all the forms at once using Nodejs I/O, I was appreciated for my work and given **SPOT award**.

Next Chapter in my Career, one day while working in the office I realized that my learning curve became flat so I have decided to switch company. I am currently working in **Pega Systems** for **Integration and Data Mgmt -R&D team** which is responsible for integration area in **Pega tool**. My development areas include building adapters for REST, SOAP and different kinds of Listeners using JAVA which will allow external systems to connect to Pega tool as well as data management within Pega tool. I was awarded as **Most Valuable Player (MVP)** for solving customers' issues.

I have gained a professional experience and valuable life skills over the past 5 years of work experience. I would like to open myself to other possibilities. I want to deepen my subject knowledge by pursuing Masters which will in turn strengthen my path in research and also provide a range of employment opportunities.

Apart from studies and career, I am an environmentalist. As I spend most of my day in office I have added greenery to my workplace. In addition to this I am one of the supporters of **Greenpeace organization and donating some portion of my salary to it from past 3 years**. I have participated in number of campaigns including beach cleaning in Vizag. Providing Education to everybody is also my top most priority. While in college I used to teach Science and Mathematics to nearby government school children.

The main reason that motivated me to apply **University of Texas at Dallas** is the curriculum you follow in the graduate program along with this you are equipped with first class infrastructure and faculty. I have a strong resolve to study at your university after learning about **The Center for Machine Learning**. I would like to request you to consider me for financial aid, besides an assistantship and your help is greatly appreciated.

To conclude, I desire to gain the expertise and eventually make an indispensable contribution to the field of Computer Science.

Thank you for the opportunity given to me to express myself.

Yamini Ratna Thota