

STATEMENT of PURPOSE (SoP)

“The greatest enemy of knowledge is not ignorance, it is the illusion of knowledge”.— **Stephen Hawking** .

With an aim to be an instrumental part of the Electronics industry, I undertook my undergraduate degree in Electronics & Communication Engineering from the reputed Sri Venkateswara College of Engineering & Technology affiliated to Jawaharlal Nehru Technological University, Anantapur. My academic background in Electronics & Communication Engineering coupled with my innate interest to explore the nuances of the industry, I have realized and observed a drastic yet consistent sophistication in the electronic products and services across the world. My exposure to the development and functioning of products and services like high definition TV infrastructure, mobiles, tablets, broadband Internet services technique has intrigued me to the core and led me to believe that there is much more to create, explore and discover in this field. Thus, my decision to now pursue my graduate degree in Electronics and Communications seems the most logical extension of my academic career.

During my undergraduate study, amongst the subjects I was exposed to, courses like Digital Signal Processing, Computer Networks, Cellular and Mobile Communications Optical Communication, and Digital Communication enthralled me. Also, emphasis on practical sessions based on Coding and Modulation Techniques, Spectrum Analyzer, Digital Storage Oscilloscope, MATLAB software and Networks greatly enhanced my interest in the field of Communication.

I have always garnered an interest in developing projects that positively affect the society as a whole. Pursuing my interest, in my fourth year of under graduation, I along with my team members, developed the project “AUTONOMOUS FIRE FIGHTING ROBOT”. The project involved a system that automatically detects the fire and stops the fire with water. For this, we deployed use of (Microchip ATmega 6) Microcontroller and (arduino.cc). My role in the project was to design the circuit and to give connection to the circuit as per design. Arduino IDE Software: “The ARDUINO IDE is a cross platform application (for WINDOWS, MACOS, LINUX) that is written in the programming language JAVA”. I along with my team member published a paper on my project “AUTONOMOUS FIRE FIGHTING ROBOT” in order to expand the knowledge of my research which I have done. I have published my paper on **The International journal of analytical and experimental modal analysis (IJAEM), Volume XI, Issue VII, July/2019**. Again I have also gave some presentation during my study in B. Tech.

As I have mentioned that I have completed my B. Tech from JNTUA so I can say that what I have learnt from there. I have seen the visual of this country which is at infinite distance. Also India is a fast growing tech country which is unparalleled to anything. It is my belief that if I learn from here than I can bring myself to an outstanding achievement. Indian Institute of Technology Kharagpur has vast opportunities in Electronics & Communication field. My skills and knowledge can be directed in a good way at IITKGP. I have worked on the Internet of Things (IoT) in my project. I have an interest in electronics and communication sector for which I can expand know interest of knowledge in this program. I am expecting I can master the program and come back to home country to utilize my skills which I can get from your institution to take this sector into another level. I can contribute myself in the electronics and communication field. I have gotten to know about that the research of your institution is very

effective. As I am a person who likes research methods very much so I can think I can be suitable candidate for your institution.

My long-term goal is to work in the research and development sector, where I want to develop product designs with high efficiency, productivity and inventions which will prove beneficial for society. I believe pursuing M.Tech in Electronics & Communication Engineering will lead me towards fulfillment of my career goal.

At Indian Institute of Technology Kharagpur, I would expand on my technical horizons by learning from theoretical courses like 5G/6G Communications, AI, Fiber Optics and Photonics, IoT, Wireless Communications, VLSI & Embedded System and Network Security and what not. It is too much tempting to study all these. The research being undertaken in the field of Networking and Wireless Communications is closely aligned with my interests. The opportunity to work and study under Prof. Mrityunjoy Chakraborty and Prof. Tarun Kanti Bhattacharyya will serve to enhance my understanding of the subject and give me the edge I require to become a successful Engineer in this field. If given an opportunity, I assure you my dedication, diligence and my desire to excel would allow me to make a remarkable contribution to the university. I look forward to a positive response from the admission committee.