

STATEMENT OF PURPOSE

Computer Science and IT have an impact on everything, and scientific research is going on in all fields. As an IT employee, I have seen how most industries rely on data and software programs in this digital age. So, I understood that Technology only can make the world a better, faster, and more connected place. I turned eager to harness my skills in technology to create gadgets and computer programs for everyday use. My undergraduate studies have given me a basic knowledge of computer theories and now I want to expand my knowledge and skillsets. Therefore, I want to acquire a Master's in Computer Science.

As a conscientious student, I have maintained high grades throughout my academic career. I completed my grade X from Gautam Talent School in Tirupati, Andhra Pradesh, in 2014 with a CGPA of 8.8/10. Later, I enrolled at Madanapalle Institute of Technology & Science (MITS) college to pursue a Bachelor's degree in Computer Science & Engineering because I enjoy coding. Here I learned a lot more about computers and other types of technologies. This knowledge helped me realise how diverse computer science is and how many problems it can help us tackle in the real world.

In my last year, I was placed in two companies: "Invensis Technologies Pvt. Ltd." and "L&T Technology Services Pvt. Ltd." When Invensis hired me, they offered a three-month internship. I attended a three-month internship from mid-December 2019 to March 2020 on "Web Development with Django" (Django is a well-known Python Framework for Web Development). I learned about web technologies and completed a project. In LTTS for one month, we went through many basic courses (C, C++ with Testing modules (G Stream), Python, Java, JavaScript, HTML/CSS, SDLC), and later they moved us to a specific Domain (Telecommunications) where I learned about generations of Telecom Signals (1G to 5G), then moved to the Shadow project phase where we learned Automation Testing using Python + Robotic Framework + Selenium. Further, I was promoted to a full-time employee and assigned to a project where we were obliged to interact/deal/work directly with the client, with no involvement from any Manager in my LTTS business. Here, I studied BPM/BPMN Technology utilizing the Camunda Tool (the industry's premier BPM/BPMN tool). I've had several significant issues with no solutions; I've supplied a workaround for a short time working, then I identified the perfect solutions in no time and showed them how we can do them. Thereafter, I moved on to Cybersecurity projects, where I learned about the top ten OWASP vulnerabilities for web and mobile applications, as well as how to detect and mitigate them using Burp Suite and a few other tools. My first cybersecurity project was to perform vulnerability assessment and penetration testing (VAPT) on a thick client application, where I discovered a few vulnerabilities such as injection attacks and weak authentication mechanisms and used tools such as Wireshark and Echo Mirage to analyse network traffic and Hex Editor Neo for digital forensics. After running VAPT on the application, I realized that a single vulnerability could expose customer-sensitive data to unauthorized users, resulting in a negative

customer experience. Subsequently, I have completed a plethora of certifications such as Red Hat System Administration, Technical Support Fundamentals, Introduction to Cybersecurity Tools & Cyber Attacks, Introduction to Python for Cybersecurity and many more. Throughout my bachelor's degree, I served as my class representative for all four years and participated in numerous workshops (Python, Hacking, Android Development, Game Development, etc). I've also given paper presentations and seminars and volunteered for and managed several Student Cells (ED-Cell<Entrepreneurship Development>, MSR-Club<MITS Social Responsibility>). I was the Student Team Coordinator for our College Fest and received appraisals, for reducing paper wastage/usage.

I have always had a passion for technology and its potential to improve our lives, but as technology has become increasingly integrated into every aspect of society, I have also become increasingly aware of the potential for harm. This realization led me to pursue a career in Computer Science, where I can use my technical skills to develop & protect individuals and organizations.

My first preference for pursuing this degree was the United States. With a long history of academic brilliance, outstanding educational quality, faculty members, research areas, state of art labs, and internship opportunities. In addition to academics, US universities provide a solid training framework and exposure to specializations. Renowned universities provide exceptional Computer Science programs that are curated by academic specialists to meet recent industry standards.

University of Maryland, Baltimore County (UMBC) offers a comprehensive and well-rounded master's degree in Computer Science that is designed to prepare students for lucrative positions in the field, which is why I chose it as the curriculum covers a wide range of topics by preparing students for a variety of roles. Students will get a chance to learn from professionals and qualified faculty members with real-world expertise in the subject of various fields. Exposure to real-world situations, emphasizing research, will enable me to participate in cutting-edge technology research and gain expertise. UMBC is located in Baltimore, Maryland which offers a diverse and vibrant community with many opportunities for internships and job placements.

After finishing my Master's degree, I want to work in a position where I can enhance my knowledge and give my full best services to the organization. To have a thorough understanding of the IT industry, I aim to advance my career opportunities by enrolling in your prestigious institution's MSc in Computer Science program. Given a chance, I would prove my perspective, and I plead you to kindly grant me admission into your university to fulfil my aspirations. I am eager to broaden my horizons and prove my worth in the field of computer science.