S M Raisul Islam

B. Eng in Software Engineering,
Zhengzhou University, China.
WeChat ID: the_raisul
Email: smraisulislam.bd@gmail.com
LinkedIn: linkedin.com

STATEMENT OF PURPOSE

Introduction

Since my childhood, I have been deeply fascinated by technology. My passion began at home, where my elder brother and I spent hours of **playing computer games**, wondering how these systems worked. That curiosity slowly transformed into a desire to understand the logic behind every digital process. This lifelong interest in technology eventually led me to pursue a Bachelor's degree in **Software Engineering at Zhengzhou University, Henan, China.**

From my very first semester, I was captivated by how software could transform complex ideas into practical solutions. I achieved the best score in C Programming and Probability Theory and Mathematical Statistics, reflecting my strong grasp of both programming and mathematical logic. My enthusiasm only grew stronger as I studied Data Structures & Algorithms, Computer Organisation & Architecture, and Embedded Systems, which helped me understand the fundamental principles that power modern computing.

Academic Journey and Growth

My academic journey has been both rewarding and challenging. During my undergraduate studies, I maintained a strong academic record with a GPA of 3.85/4.00, but the COVID-19 pandemic disrupted the usual learning environment. As classes shifted online, I had to return to my home country, and due to some family issues, I was unable to fully concentrate on my studies. As a result, my academic performance temporarily declined. However, I made a strong comeback during my thesis project, where I achieved a perfect score.

Real-Life IoT Inspiration

My passion for **Smart Automation Systems/IoT** was not born in a classroom, but from a personal experience. I have a **Cockatiel bird** that I love to train and care for. Often, when I had to leave home for one or two days, I realised how difficult it was to manage its feeding and care properly. This problem inspired me to develop an IoT-based automated system to manage my bird's daily needs remotely.

Using sensors and microcontrollers, I designed a small system that allowed me to open the bird's door, control food and water supply, and monitor its environment using my phone. I could even decide how many grams of food or how much water to provide by simple commands. It was both fun and deeply satisfying to use technology to solve a real-world problem in my own life.

I realised that the future of technology lies in **Smart Automation Systems/IoT**, where devices communicate, think, and act intelligently to make human life easier and more efficient. Since then, I have been determined to specialise in this field.

Research Interests and Future Goals

With a strong academic foundation and hands-on experience in **C/C++**, **Python**, **Embedded Systems** (ESP32, sensors, actuators, MQTT), **Linux**, **FreeRTOS**, **AWS IoT/Azure IoT**, **Network Security**, and **Basic Electronics (self-study)**, I have built a well-rounded technical skill set and a practical problem-solving mindset. Over the past two years, I have also been working as an **ICT Lecturer** at a high school in my country, where I guide students through real-world technology projects. This experience has not only enhanced my technical expertise but also deepened my passion for **teaching, research, and innovation** in the fields of **computer science and embedded systems**.

My research interests lie at the intersection of the **Internet of Things (IoT)** and **Artificial Intelligence (AI)**, particularly in the areas of edge intelligence and **smart automation systems**. I am deeply fascinated by how lightweight AI models can be deployed on resource-constrained devices to enable real-time decision-making, powering applications that range from **smart homes to intelligent healthcare systems**.

Why Tongji University and CSC Scholarship

I am particularly drawn to **Tongji University** because of its strong focus on IoT systems, embedded intelligence, and AI integration. I am especially inspired by the research being conducted in **Wireless Sensor Networks and the Internet of Vehicles**, **IoT** as it aligns perfectly with my goal of developing efficient, scalable, and intelligent IoT solutions. Courses such as *Advanced Distributed Systems* and *Machine Learning at the Edge* will not only strengthen my theoretical foundation but also equip me with the practical skills needed to contribute meaningfully to this evolving field.

The Chinese Government Scholarship (CSC) would give me the opportunity to dedicate myself fully to my studies and research without financial burden. More importantly, it would allow me to contribute meaningfully to China's growing innovation ecosystem, where academia and industry collaborate closely to solve global challenges.

Conclusion

In summary, my journey from a curious child experimenting with technology to a software engineering graduate building IoT systems has shaped me into a passionate learner and problem solver. I have experienced both academic excellence and real-world innovation, and I believe that my blend of technical knowledge, creativity, and resilience makes me well-prepared for this next academic step.

I look forward to joining **Tongji University** as a Master's student and contributing to its legacy of research and innovation in Software Engineering and IoT. With the support of the CSC Scholarship, I aim to not only advance my education but also make meaningful contributions to the future of smart, connected systems.

Thank you for considering my application.

Warm regards,
S M Raisul Islam
B.Eng. in Software Engineering,
Zhengzhou University, Henan, China.
Nationality: Bangladeshi.
✉ Email: smraisulislam.bd@gmail.com,
📞 Phone: +880181919-2112
💬 WeChat: **the_raisul,** 🔗 LinkedIn: linkedin.com