STATEMENT OF PURPOSE

Sujan Shrestha

sujan.shrestha@example.com
18 November 2026

APPLICATION	Graduate admission	PROGRAMME	MS in Computer Science
UNIVERSITY	[University name], [City, State]	TERM	Fall 2027
APPLICANT ID	[Applicant ID]		

Statement of purpose — MS in Computer Science

I want to study distributed systems in an MS in Computer Science: how to build services that stay correct and fast when thousands of people use them at once. The interest began at work. In my first year as a backend engineer, our wallet's payment service slowed almost to a stop on the evening before Dashain, when traffic reached six times its normal level, and I spent the night helping to keep it running. I could fix the symptoms but not explain the design choices behind them. After three years of work I know which questions I need a graduate degree to answer.

I completed a BSc in Computer Science and Information Technology at Tribhuvan University in 2023 with a CGPA of 3.62 out of 4. The courses that prepared me most were Data Structures and Algorithms, Operating Systems, Database Management Systems and Computer Networks, in which I had my best grades. For my final-year project, three of us built a bus-route finder for Kathmandu Valley that answered queries from a graph of 1,200 stops; I wrote the routing service and its tests. Since graduating I have completed an online course in distributed systems and worked through its exercises in Go. At work I write Go and Python every day and use PostgreSQL and Redis.

Since August 2023 I have worked as a backend engineer at a digital payments company in Kathmandu, in a team of six that runs the service behind wallet top-ups and merchant payments. My main project was moving payment confirmations from a single database to a queue-based design. I proposed it, built it with a senior engineer, and tested it against a copy of a month's real traffic. After it went live in March 2025, failed confirmations at peak hours fell from about 2 in 1,000 to fewer than 1 in 10,000. I also wrote the on-call guide my team now uses. The work taught me what a classroom could not: most failures come from timing between services, not from a single program. It also left me with a question I cannot answer at work: how to show that a design stays correct when parts of it fail. That is what I want to study.

I am applying to the MS in Computer Science at [University] because its systems track lets me take distributed systems, cloud computing and fault-tolerant design in the first year and then write a thesis. Professor [name]'s group tests distributed systems for failures before they reach users, which is the question my work left me with. I have read two of the group's recent papers and would like to do my thesis there. The systems courses also end in a team project, which is how I work now. I bring three years of running a service that real people depend on. I looked for this in Nepal first: the master's programmes I could join there teach distributed systems as a single course, not as a track with a thesis.

After the MS I plan to return to Kathmandu as a senior backend or site reliability engineer at a payments company or a bank. Digital payments in Nepal have grown quickly, and the companies running them need engineers who can design for failure, not only repair it; few engineers in Nepal have studied this formally. My employer has written that it would consider me for a senior post when I return. Within ten years I want to lead the engineering of a payments platform in Nepal and teach a systems course part-time at a college in Kathmandu.

Sample from careerkyt.com — make your own free

Between my +2 in 2018 and the start of my bachelor's in 2019 I had a gap of eight months, in which I taught mathematics to Class 8 students at a school in Bhaktapur. The school's letter is with my documents.