

## **Statement of Purpose**

**Applicant: Arpan Joshi**

"Education makes a people easy to lead, but difficult to drive; easy to govern, but impossible to enslave." This quote by Lord Brougham tersely sums up scientific research for me. My aspiration for learning and perseverance at all the times has been the foundation of my pursuit for knowledge so far – both during my academic as well as professional career.

I am presently working as an Energy Development officer (section chief) in the Government office in Nepal. I have been appointed as an Agricultural Engineer in the District Development Committee; District Energy and Environment Section, for the sustainable development and promotion of rural energy technologies especially the micro-hydro system as an entry point, program envisaged by the Government of Nepal, UNDP and the World Bank. In the process, I got the opportunity to show my talent and nurture theoretical knowledge in the practical field.

My analytical skills were sharpened due to numerous challenging assignments and projects. Among the core courses I especially enjoyed irrigation engineering, hydrology, fluid mechanics, renewable energy System, natural resource management, soil and water conservation engineering, remote sensing and GIS which further motivated me in water resources and environment sector. Besides this, my professional experiences with the NGO "EFFORT Nepal" for the "Integrated Environment and Sanitation Program" funded by Seam-N, Dharan and Renewable Energy for Rural Livelihood Program (RERL) gave me chance to work with water, energy and environment related projects like drinking water supply and sanitation, hydrologic analysis and micro hydro and other renewable energy technologies.

I have a specific interest in Geographical Information System (GIS), a powerful tool for natural resource management. After taking several related classes in GIS as a part of my elective Soil and water conservation engineering, I began interning for the Universal Service Limited and assisted the Universal services in spatial and non-spatial data analysis, digitizing themes such as vegetation, wildlife habitats, fire locations etc., and tabular and graphical presentation of results. I hope to use the tools I acquire during this internship in my continuing study of our MSc in Water engineering. I have remained a highly motivated and sincere student. I sincerely attribute these achievements to the fact that I genuinely enjoyed what I learned in this period. In my final year B.E., I have taken up the project titled " Performance of irrigated agriculture under the conjunctive use of surface water and ground water irrigation system" and seminar on "Remote Sensing in Assessment & Management of Natural Resources" and a paper on "Status of Biogas Plant in Nepal" Retrospect and Prospect under the able guidance of Professor Mr. A.K Shukla. These projects were highly instrumental in widening my horizons and giving me the feel of a research environment which I found very stimulating. Since then, I believe that water resources and environmental management is both a science and an art requiring a high degree of engineering skill, economic sense and overall judgment. The field of Water engineering happens to be my area of interest. I would love to apply myself to the unprecedented challenges and opportunities associated with this happening field.

My initial interest in pursuing the graduate study in the field of Water engineering was further bolstered by the fact that our country Nepal has various industries and abundance untapped potential of water power, but the manpower is not so promising. They seriously lack technical as well as management skills. "The essence of knowledge is not in having it but in applying it "- is what I believe. After completion of Master degree from your university, I am planning on returning back to Nepal to make some noticeable changes in the engineering sector and help the new emerging

engineers who wish to develop new green technologies and engineering tools needed to properly manage the water and environment.

I strongly hold the belief that water resources are the backbone of all developments and the right of every individual. I am certain that the knowledge gained through graduate studies will benefit me and my country, Nepal.

In this age with the rapidly changing technology just an understanding of the subject will not suffice. One has not only to delve into the subject practically to gain a thorough understanding of it. The only way one can keep up with the brisk pace of technology is to subject oneself to the learning and applying process. Through my academic and professional career, I have been able to understand that an undergraduate degree is merely an exposure to the various fields in any branch of education. This belief has led me to pursue a master degree in Water Engineering. I believe that graduate study will not only let me explore the advanced domains of my fields but also give me an opportunity to acquire right tools to do the right job, a task that which I relish.

I am well versed with software such as Autocad, GIS, Digital model. I am conversed with design of water supply and sanitation projects, design of electrical, mechanical and civil components of micro hydro system, it all started with attending a week training on "Advanced training for Technical Officers for the Design and Estimation of Micro Hydro Schemes" provided by the REDP. Besides my knowledge in computers and designing, I am confident that I have the potential to successfully complete the master's degree in Water Engineering from your university. I also have the qualities to be a good researcher. Being able to identify patterns and relationships that are not obvious to others is perhaps my greatest strength. This, I hope, will prove very valuable while I am at your university because an integral part of being a researcher is to perceive the balance between theory and practice along with analytical rigor and intuition.

My teacher once said "studying is similar to life, you are a Bachelor being naïve and full of enthusiasm then you learn through hardship and experience to be pragmatic yet not losing your ambitions, then you truly are a Master." I have no doubts about my enthusiasm and dedication but strongly feel that there are still more things that I should learn to perform at my optimum level. As I have already garnered some experience, I feel that this is the right time for me academically and professionally, to enroll myself for the master degree in Water Engineering.

Aleksandras Stulginskis University with its renowned experienced faculty, state of the art laboratories and its erudite environment is an ideal place for me to better myself. The desire to delve deeper into this subject persuaded me to place application at your prestigious University. It would therefore be an honor to be able to secure admission to pursue my graduate studies.