Smart Governance for developing cities

Background: Information technology in Nepal is developing at such a rapid growth that other sectors seems to get less interest among general population esp. youths. With the right touch of IT through mobile and computing devices, development sectors could have profound change in direction of control. In this scenario, developing a smart city is only a simple tweak through changing the habit of general population in use of applications and modern gadgets from the existing communication infrastructure.

Research: To develop a smart city, I am quite enthusiastic to learn on social media analysis, remote sensing, networked application development and standalone sensors solution. Social media analysis is quite essential to process the needs of development more of like getting raw data for major roadmap. Advanced remote sensing techniques could be implemented for land traffic control, agriculture stats or to monitor infrastructure state of ruin. It is the need felt in a near of 4/5 years. As custom embedded systems are also making a large arena in business market as the use of motion sensors, RFID scans, GPS etc. in shopping malls and modern offices; it is essential for the governing body to realize these assets in implementation of right strategies and plans.

This research will try to address these factors in overall:

1. Advanced Data Mining and Concepts
2. Best Storage Methods and Quick Retrieval of required data
3. Self-realizing autonomous systems to provide triggers in areas of emergence
4. Machine learning and remote-sensing techniques
5. Monitor parameters of e-governance.

Self-experience/Motivation: I have been quite affected by the lack of information transition from one form to another or one place to another. It has thereby resulted in lack of authenticity. This directly affects the form of governance – the district annual plans, existing govt. offices performance, the projects aiding the offices and ultimately the utilization of human resources. These could directly be felt during quick-redemption from earthquake in assessing the damages and provide fast-volunteering in emergence. We used the social media techniques in Office of DDC Parbat to collect the major affected areas and justify their states.

Obtained Skills: I have known the best use of web-application for custom design of information architecture in governance. I have configured a custom designed server to enable the needs of networked application architecture and data storage. I tried to influence the governing bodies to use custom designed embedded system using raspberry pie but again it couldn’t be realized properly in absence of proper sensors and again reliability in performance was major issue in my own experiments. It has been quite a new experience in the role of ICT to address the issues inside different bodies of governance.