

Using his “brains” to make a difference

July, 2012

Abhinav Agarwal turned down an internship at MIT to come to Canada for biomedical research at UBC

Coming to Canada this summer was about more than research for Abhinav Agarwal of the Indian Institute of Technology Guwahati; it was about contributing to meaningful research while gaining worldly experiences as a global citizen. Having completed an internship in South Korea last year,



where he developed a wireless camera surveillance system for police vehicles, the bright Electronics and Communications Engineering student turned down an internship at Massachusetts Institute of Technology to come to University of British Columbia Vancouver through Mitacs Globalink.

This summer, under the guidance of Dr. Rabab Ward of the University of British Columbia’s Department of Electrical and Computer Engineering, Abhinav is helping to develop a brain-to-computer interface system which classifies brain signals to be used in rehabilitation devices for disabled patients. The device will decipher the commands of the patient’s EEG brain waves and perform tasks to assist them in daily life or rehabilitative therapies. State of the art algorithms presently used in similar devices are not suitable to being made wireless which is a detriment to efficient and effective implementation of these new brain-to-computer devices. Therefore, he and his professor are developing more efficient algorithms which are suitable to being deployed in wireless technologies.

Though his parents miss him dearly, Abhinav has been enjoying an all-around experience that he says has helped him to grow as an individual and as a researcher. With his other friends in the Globalink Program, he has attended a workshop on project management, and numerous conferences such as “The Data Effect”, a conference on ethical data gathering and use in the biomedical field. Abhinav enjoyed hearing from the mayors of many greater Vancouver cities such as Port Coquitlam and Surrey speak about the research and industry possibilities in their municipalities. He has also enjoyed ample opportunities to go swimming, ice skating and to visit tourist attractions in and around Vancouver.

Together, these experiences have helped confirm his desire to return Canada one day. “Mitacs Globalink provides excellent opportunities for international students to experience Canada’s research environment and industry innovation. I love it here!”