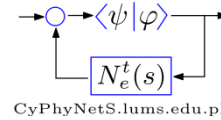


# Research Fellowship in Underwater Acoustic Signal Processing

Department of Electrical Engineering  
LUMS School of Science & Engineering  
Lahore, Pakistan



**Project Title.** Bioacoustic Tracking of the Indus River Dolphin  
**Group.** CYPHYNETS (Cyber Physical Networks & Systems Lab)  
**Partner.** World Wildlife Fund (WWF), Pakistan  
**Lead.** Dr. Abubakr Muhammad



Indus dolphin (*Platanista minor* and *Bhulan* in colloquial Sindhi) is one of the four fresh water dolphins in the world. There is a dire need for its non-invasive study and to develop sustainable eco-friendly strategies for its conservation. LUMS has entered into a 3 year partnership with WWF Pakistan to develop an underwater acoustic observation system for studying the Indus dolphins. More details can be found at <http://cyphynets.lums.edu.pk/>.

Recent PhDs in engineering from a reputed university are invited to apply for a 1 year research fellowship for the aforementioned project. Familiarity with general techniques of digital signal processing, electronic amplification and filtering of sensor data, data acquisition; development of research proposals and a willingness to do fieldwork or spend extended periods at a remote site in Sindh are essential requirements. Knowledge in some or few areas of embedded systems, acoustics or sonar systems will be desirable. Well rounded individuals with broad technical, communication & interpersonal skills will be preferred over specialists in a narrow field. A minimum salary of Rs. 75k/month will be offered matching the candidate's experience and background.

## Consideration for Adjunct Faculty.

Candidates with a strong teaching potential may also be considered for an adjunct faculty position in electrical engineering at LUMS. The focus of the position will however remain to be research and not teaching. All other privileges available to adjunct faculty will apply during teaching assignments.

## Application Procedure

Interested applicants are invited to send their applications to [cyphynets \[at\] gmail \[dot\] com](mailto:cyphynets[at]gmail[dot]com) by January 15<sup>th</sup>, 2010. Please provide CV, list of references, date of availability, copies of research papers (if any) and all other information in PDF format. For informal queries, please contact [abubakr \[at\] lums \[dot\] edu \[dot\] pk](mailto:abubakr[at]lums[dot]edu[dot]pk).

## About LUMS School of Science & Engineering

Lahore University of Management Sciences (LUMS), founded in 1985 is the premier private research university in Pakistan. Internationally recognized for its programs in business, humanities, law and social sciences, LUMS launched its School of Science and Engineering (SSE) in 2008 with a vision to provide multi-disciplinary education and research in the fields of mathematics, physics, chemistry, electrical Engineering, computer science and biology. The laboratory for Cyber Physical Networks and Systems (CYPHYNETS) was established at its electrical engineering department in 2009. It conducts interdisciplinary research in various areas of applied mathematics, applied physics and systems engineering including robotics, feedback control systems, networked sensing, smart infrastructures and water resource management.

