Call for PhD Supervisors
In computer science and information technology

August 2013
Summary

This is a program to enable young lecturers in remote colleges and universities, inside and outside Sudan, to obtain PhD degrees in computer science and information technology using a blend of distance education through the internet and face-to-face supervision. Through the internet, Professors from universities all over the world participate as lecturers and supervisors. They would meet their students face-to-face at least once a year. Sudan University of Science and Technology (SUST) would offer the degree and coordinate the activities of the program.

Interested Professors, please email CV, areas of specialization and research interests to: supervisorsandprofessors@gmail.com

1. Introduction

Many young college and university lecturers working abroad and in remote rural areas of the Sudan and neighboring countries are deprived from the opportunity of pursuing higher university degrees. In Sudan the universities that offer PhD degrees and other graduate qualifications are in the capital city Khartoum. These PhD granting universities do not have enough supervisors capable of covering the demand.

The project would give the qualified candidates the opportunity to upgrade their qualifications to the PhD degree which is a prerequisite for their promotion to the status of assistant professor. Currently most of those targeted are females as many of them find it difficult to pursue education abroad due to their family obligations (some are married and some have children).

The internet, which is now available in all colleges, will be harnessed for delivering lectures, assignments and communications between supervisors and students. Examinations would be scheduled periodically and are taken face-to-face locally at Sudan University of Science and Technology (SUST) in Khartoum.
Academic resources for teaching and supervision are drawn from the world wide resources and utilized through the internet.

The PhD supervisors would deliver lectures and contact their students through an advanced technology (e.g. WebEX) available on the net. They would meet their students face-to-face in SUST at least once a year in June /July, which coincides with the summer vacation of most of the targeted candidates. Many of these professors do not wish to come and work in underdeveloped countries such as Sudan, they can, however, sustain short visits once or twice a year.

SUST avails an efficient coordination mechanism responsible for scheduling lectures, assignments, technical support and the face-to-face examinations and meetings in June/July in SUST.

2. Objectives

   1. The use of ICT for qualifying young academics.

   2. The strengthening of local PhD programs with international resources and experience.

   3. The capacity building of SUST and other local institutions and their staff through involvement in up-to-date research problems and methodology.

   4. The provision of qualified teaching staff for local universities in a few years.

   5. The provision of opportunities for women in academia to obtain their PhD.

3. Qualifications of the supervisor

   1. The supervisor must be an Associate or Full Professor in one of the areas of computer science and information technology or a very closely related specialization.

   2. Has supervised many PhD students.

   3. Up to date with the research problems in the area of his specialization and is interested in supervising research and publishing.
4. The Students

All the students accepted for the program have MSc degree in computer science or information technology which was taught in English. English is their second language. The majority of the students are females. They are full-time lecturers in colleges. They will devote a minimum of twenty five hours per week for this program. They will travel to Khartoum in their summer vacation (June, July and August) to take exams, meet supervisors, meet research groups etc. They will also come to Khartoum in January for a week to meet supervisors and to take the semester examinations.

5. Calendar

<table>
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<tr>
<th>First Semester</th>
<th>January to May 2014  (courses taught by SUST staff)</th>
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<tr>
<td>Examinations</td>
<td>9th June 2014</td>
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<tr>
<td>Supervisors Presentations</td>
<td>During the period 21st – 26th June 2014</td>
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<td>Second Semester</td>
<td>September 1st – December 2014</td>
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<td>Examinations</td>
<td>January 2015</td>
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<td>Third Semester</td>
<td>February – June 2015</td>
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<td>Presentation of proposals</td>
<td>15th June – 6th July and 22nd July – 15th August 2015</td>
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<tr>
<td>Research</td>
<td>From August 2015… …Open Calendar.</td>
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6. Tasks to be undertaken by a supervisor

1. Prepare a general presentation on your research area. A presentation would take about 90 minutes plus 30 minutes for discussion.

2. Plan to be in Khartoum during the period 21st – 26th of June 2014. You are welcome to arrive as earlier and leave as later as you wish. During this period you will give a 90 minutes presentation about your general research interests, the particular area which your students will research and a brief outline of the content of the course which you will teach in the second semester. Your presentation will help the students to choose your area or to stay away from it
depending on each student’s preparation and interest. You will meet the interested students later on the same or the next day. You will also meet SUST personnel and sort out any technical and administrative problems.

The students will be in SUST from the 9th to the 19th of June for their examinations. They will meet supervisors during the period 21st – 26th of June 2014.

3. The second semester will start on September 1st and ends on 21st December 2014. There is a one week break (28th September - 5th October 2014).

A comprehensive introduction to each research area will be offered as a course(module) in this semester. Each student will choose two courses (areas/modules) taught by two supervisors from the areas that were presented by the supervisors. Each supervisor will be teaching one course. It is expected that each course will be attended by about ten students.

The students will all take Research Methodology as a third course.

4. Second semester examinations will be taken in Khartoum from 17th to 22nd January 2015. Supervisors will send their examinations to the Coordinator. It is optional for supervisors to be present.

5. The third Semester is scheduled from 1st of February to 24th May 2015. Each student will continue with only one area( under one supervisor). During this semester and the month following it each student has to accomplish the following three tasks under the supervision of his supervisor:

(i) Literature survey of his research topic.

(ii) Write a survey paper and obtain an acceptance for publication.(The supervisor will be the coauthor of the paper. )

(iii) Prepare his research proposal.

6. Proposals will be presented and examined in Khartoum during the period 15th of June – 6th of July 2015 OR 22nd of July – 15th of August 2015. The choice of the exact dates would be coordinated to suit the supervisor, his students and the program administration. Each student will present his proposal to a panel consisting of his supervisor, and two professors from SUST. It will be attended
by the other students of the supervisor. A supervisor may need to meet his
students before and after their presentations.

From here onwards each student will continue his research under his supervisor.
The supervisor is expected to have a group of about five students.

7. It is required that a student sees his supervisor face to face at least once a year. It
is expected that the supervisor meets his students in the summer at SUST and he
will have regular meetings with his students through WebEX.

8. Before presenting his dissertation for examination, the student has to submit at
least one other paper for publication. It would embody some of his research
results.

9. The final examination (oral/ viva / thesis defense) will be held in Khartoum. The
supervisor has to be there. The internal and external examiners will be chosen by
SUST Research Committee in consultation with the supervisor.

7. Entitlements of the Supervisor

The supervisor is entitled to the following:

1. On each trip to Khartoum: ticket, full board accommodation, local transport and
   an honorarium of one thousand USD.

2. On teaching the course of the second semester: four thousand USD
   (Inclusive of setting and marking the examination)

3. for the first, second and third tasks of third semester: five hundred USD per
   student per task (i.e. one thousand five hundred USD per student in the third
   semester).

4. From 16th of August 2015 until the student passes his final examination: One
thousand five hundred USD per student per year

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