

Progress Report of MS / PhD Students

Roll No: 200950008

Name: Gollapudi VRJ Sai Prasad

Semester: Spring 2014

Year of Joining: Monsoon 2009

Programme: MS / PhD in CSE

~~Full Time~~ / Part Time / ~~External~~ (√)

Email ID: saigollapudi1@gmail.com

Mobile No: +91 996 318 7772

Briefly outline your progress of research work over the last semester.

Work Done in Spring 2014:

In the previous semester I had submitted three papers and three research proposals. I am glad to report that all the papers were accepted. Here are the citations

1. Gollapudi V. R. J. Sai Prasad and Niyati Mishra. 2013. For video lecture transmission, less is more: analysis of image cropping as a cost savings technique. In *Proceedings of the 11th Asia Pacific Conference on Computer Human Interaction* (APCHI '13). ACM, New York, NY, USA, 318-324. DOI=10.1145/2525194.2525299
<http://doi.acm.org/10.1145/2525194.2525299>
2. Prasad, V.R.J.G.S.; Choppella, V., "Descriptive Study of College Bound Rural Youth of AP, India," *Technology for Education (T4E), 2013 IEEE Fifth International Conference on*, vol., no., pp.76,79, 18-20 Dec. 2013
doi: 10.1109/T4E.2013.27
3. Himanshu Zade, Santosh Arvind Adimoolam, Sai Gollapudi, Anind K. Dey, Venkatesh Choppella; CHI 2014; Edit distance Modulo Bisimulation: a Quantitative Measure to Study Evolution of User Models

The proposals that were made for research grants to NWO (of Netherlands Govt.) were, however, unsuccessful. Part of the reasons for this problem was our lack of Industry partnerships.

Beyond the work involved in publishing my papers, I had also read extensively in my area of Web Accessibility. Moreover, I tried coordinating with BTech students to get them to do some SWEETs based web app development. One team from VNRVJIET started off well but trailed out in the end. IIIT-Hyd BTech student helped in setting up our own – ie. IIIT-H's own Sweet Store.

Work Done in Spring 2014:

In this semester two noteworthy achievements can be cited. First is a publication of a Sweets based Renarration paper to the popular W4A conference. This was well accepted and received. I personally travelled – at my own expense!! -- to Seoul, South Korea to present this paper. Fellow researchers received the work favorably and welcomed me into the Web Accessibility community. During the trip I met up with many professors, researchers and PhD students from various universities and countries. All had given very useful personal advice, topic advice and also assured me future support in my work. Moreover, I got some very good leads to work with-in my own Web Accessibility community. The trip to Seoul, S.Korea had further inspired me to take on my second achievement this semester ...

The second good achievement that I had this current semester is in the zooming-in of my research area and topic. Till now I was discussing Accessibility or Web Accessibility as a large domain. I talked about Sweets and Renarration as technologies... overall, I waited for more

insight to glue them together into a coherent story. Today, post my visit to W4A conference, I feel that I have now found a narrower scope and a richer domain (within Web Accessibility) to work with.

Current version of the larger PhD problem I am pursuing is: Making online Cartoons Accessible to blind users. This requires me to build hybrid systems – with some automation, and some social annotation – that would allow for a visual to be transcribed and annotated for use by a blind user. The work will take me into processing of visuals (i.e. Images) for the blind – which is a fairly large scoped subject. However, since I am concerned about Cartoons, it is somewhat contained. It is not as restricted as Engineering or Scientific drawings – which tend to be somewhat formal and structured. Nor, is it as unconstrained and arbitrary as picture processing. By working with cartoons I will be able to process images that are moderately structured. I will get into the application and usage of Image Processing, Machine Learning (from application point of view), Character / Object Recognition, Text-To-Speech type technologies etc. Please see attachments for further details on my topic. Also, note that my current work will be ensure that I will leverage the earlier work that I have done in HCI/Usability domain.

Plan for next 4 months:

My future research work will consist of,

1. developing of a image-processing web-app using Python-Flask
2. doing some experimental work with simple and complex scientific & engineering diagrams with sighted & unsighted users; and
3. on the developed submitting a technical paper to TACCESS Journal.

See attachments for further details
