

File 20100331.0722: Notes from meeting with Dr Martin:

When using the new speakers on Skype, use an extension cable and set the volume knob to straight up.

I reported that my paper was submitted to the VALID 2010 conference in advance of the deadline yesterday. The conference organisers keep making changes to the CFP, most recently to extend the deadline again, this time to 5th April. On 28th March a whole new set of Instructions to Authors was posted along with a template for the format of references, number of columns (IEEE style) and rules for use of abbreviations. I followed their specifications exactly. Dr Martin read the paper and made a few suggestions including to submit the paper in the work-in-progress category (also newly appearing in the updated CFP). The organisers encouraged submission of work-in-progress papers and noted that they will be peer-reviewed, will be published in the proceedings, and will require an oral presentation at the conference. I hope the paper gets accepted. Notification is scheduled for 25th April; the conference is in August.

DIACAP certification of RM 5.0 is proceeding normally. I have talked with three people who have been in Washington, D.C. over the past couple of weeks supporting the Beta 2 testing. NSA is running two labs: a penetration testing lab at Ft Meade, Maryland and an outsourced IV&V lab in Charleston, South Carolina. Testing is proceeding exactly as described in my paper. The government sponsor won't pay to have a developer representative present on site the whole time during testing, so Lockheed has flown three different people in and out during this time. The IV&V contractors in Charleston are effectively re-running the Factory Acceptance Tests over again. They have failed a bunch of test procedures (all minor to moderate, nothing to worry about) because they keep trying to test features of the software that weren't installed. Both NSA testing sites are currently expressing frustration that they can't test a fully configured system; the developer responded that they never asked for a fully configured system in the first place. The developer is sending another person to D.C. next week to configure the Ft Meade (pen testing) system to be identical to Charleston. NMSO (Navy funding source in San Diego, California) always waits until the last minute of the last day to provide funds to continue. All of this is the normal situation and the way the relationship between government sponsor, developer, and certifiers on the programme always operates.

I told Dr Martin about an interesting paper I found in PLoS Biol. last week. It uses a couple of statistical techniques called Egger's regression and Funnel Plots to look for missing data in published studies. The researchers looked at the size of the error bars on published plots of data in 525 studies and compared them to the size of the effects found. The funnel plot (relating variation on the y-axis with effect size on the x-axis) is a cloud of points that ought to have a triangular shape, since as variation decreases along one axis, it is expected that the size of the effect, whether above or below, nevertheless converges on the true value along the other axis.

In some of the published studies, however, the entire left side of the triangle is missing. This is a good indicator of data that were collected but never published. The authors predict the existence of 214 experiments that must have been performed but were never reported, in addition to the 1,359 that were reported.

I am not sure if I can use this method because studies in my field are so primitive statistically still that they almost never put error bars on their plots. It is a neat analysis to read about, though [E.S. Sena, H.B. van der Worp, P.M.W. Bath, D.W. Howells, and M.R. Macleod. Publication bias in reports of animal stroke studies leads to major overstatement of efficacy. PLoS Biol., 8(3):e1000344, March 2010. doi: 10.1371/journal.pbio.1000344.].

I asked for advice on what to concentrate on next, the journal article for Crosstalk or methodology chapter. Dr Martin suggested to get the methodology chapter filled in but not spend time polishing it now, then take the material from that chapter and use it to finish the journal article. For the confirmation of status I don't need an absolutely polished chapter, just a preliminary one, but it should be essentially complete. It is more desirable to have a published paper. The Crosstalk article will be a longer version of the paper I just finished with new material comprising the contents of the methodology chapter.

The first thing I need to do next is the practitioner survey questions. That forms part of the methodology chapter so it will give me a pre-written section. I hate talking to people but I have to do it. If I have any doubts about the design of the survey I will run it past Dr Jirotko. I will test the survey on a few tame participants before spamming the entire list.

I have confirmed speaking slots for three talks on consecutive weeks at Lockheed: 9th, 13th, and 20th April on the topics of Cross Domain Systems, DIACAP certification, and my research. I have to get an

abstract for the first talk to the meeting organiser today. [Update: this is done.]

Regarding use of language in the paper, Dr Martin said I started with a couple of questions in the paper, which was a little unusual but set the tone nicely for this type of contribution. In a dissertation, I want to be a bit more detached. But the writing language level calibration is coming along nicely. I am approaching the right tone.

I am on a roll and not stopping for Easter vacation. Next meeting scheduled for Wednesday, 14th April 2010 at 1400 Oxford time (0700 my time) after Easter.

Call ended 0721.

References