

# Alan Robert Clark's Plain and Simple Home Page

Associate Professor

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Primitive Site Map

## Academic Stuff

I lecture High Frequency Techniques in the fourth year, and Electromagnetics in the third year.  
( $\nabla \times \sim E = -j\omega\mu \sim H$ )

For six years, I lectured Electronics I in the second year, and by coincidence, for six years (prior) I used to lecture Signal Processing, which was then a fourth year elective. (One tends to lose courses over Sabbaticals :-). No-one has scraped me off Electromagnetics yet, which I have been lecturing since 1993 (when cellphones did not exist :-). In taking the High Frequency Baton from André, I break his run of 16 years! Scary responsibilities. . .

To fill in for a colleague's sabbatical, in 2006, I also did Engineering Skills in first year.

As a Sabbatical fill-in, I lectured Engineering Applied Computing, which was a load of fun :-)  
) Additional teaching duties include First year design groups, and the inevitable Fourth year projects.

With transformation being a high priority in the University, we have now changed our name to the School of Electrical and Information Engineering in the Faculty of Engineering and the Built Environment, and I am in the Computational Electromagnetics Research Group.

In my postgraduate sausage machine, I have a number of M.Sc.'s and one Ph.D. that have actually managed to graduate under my dubious tutelage, and one Ph.D. and several M.Sc.'s who are currently being processed.

I have thousands of Research Publications and millions in the pipeline. For my sins, I also look after the Computational Electromagnetics lab publications and manage both my personal and the CEM lab databases which are maintained in Bib<sub>T</sub>E<sub>X</sub> format, and are automatically html'd via the excellent HeVeA. I used to use TtH, but sadly, TtH has gone the non-GNU route, which means I once again shot myself in the foot. Read why I insist on Open Source software, I find HeVeA far preferable, and an efficient route into Turd, for those who persist in using MicroSquish. I also keep a record of all Commission B of URSI publications in South Africa.

Frustrations at students having poor exam writing skills, resulting in a *preventable* loss of marks, and poor reports have led me to say quite a lot about how to write exams and how to write a report. Within the School we also have an excellent guide to the writing of reports, but no-one seems to read it :-)

I am also often asked about advice on buying a calculator.

In terms of academic support packages, the main area of emphasis is Spice (You should try a NetSearch on this one day.....) and Quickfield for field plotting. A new update is my very own Study Guide to Electromagnetics, using SUPERNEC!

I also keep a local (relatively) up-to-date version of the C++FAQ. See questions 1, 2.2, & 2.4 first!

I keep several help files and manuals for the software that I use, centrally, so I don't keep losing it!!!

I *HAD* to include this as how NOT to wire up a server room.

I *ALWAYS* get bombarded with questions relating to the health aspects of power frequency and cell-phone frequency radiation. Herewith the most authoritative voice on the topic: IEE EMF and Health, as well as the IEE's most recent position statement. The South African government Department of Health has also issued a statement, which also contains a link to the International World Health Organization EMF group.

## Interests/Hobbies etc.

Yes, I am a GNU/Linux freak. I started in October 1992, way way before these nice “packagings” came along; we were Real Men then, actually rolling our entire systems :-).

Later I progressed to the SLS Linux package, followed by Slackware, followed by RedHat, whom I was with since version 2.0, up to 7.2, (7.0 was their worst release)! I went to Fedora Core 3, all the way to Fedora Release 14! In the old days, I would have scorned such a “wuss” approach, but I no longer need to be on the “bleeding edge”.

I now have had enough of even this “bleeding edge”, and cannot keep upgrading my systems twice a year, and dealing with the End-of-Life stuff every year. Fedora release cycles are just too often, and backward support is just for one year, meaning no more “updates” or Security fixes. After long deliberation, I am now on Debian, with much longer Release cycles, but importantly: updates for up to 3 years, and (supposedly, we'll have to see :-) in-place upgrades to the next stable release!!!

For the reasons for my eschewing Bill, read why I run GNU—I have been around these things a long time, and really need the freedom!. Simultaneously, and at the same time, I also use L<sup>A</sup>T<sub>E</sub>X as my typesetter :-) for which I have written/maintain several packages.

As a general editor (C++, L<sup>A</sup>T<sub>E</sub>X, PIC code, raw HTML, M4 macros (cct), Pine mail) I naturally use vim(). Follow link for my customizations, its a brilliant little editor.

As a graphics package, I have (horrors) also gone the text route. The efficiency is just mind-boggling, hence I use Circuit Macros for my graphics, which is really a superset of GNU pic. Follow the link for examples etc.

If you have difficulty in finding your way around the Secure Shell, there are some tips.

I keep a small, but growing, file on a simple home network.

I mess around with MicroChip's brilliant range of full-featured 8-bit MicroControllers, my obvious favourite being the Flash programmable series, notably the 16C—F84, but Microchip is listening to its users, and the flash series is rapidly expanding. Some of my projects may be of interest, including a serial port super-cheap programmer.

There is only one Radio Station in South Africa, which I am an avid listener of.

I have written some tips on getting DVD's produced from a Digital Video Camera, and how to get Bluetooth Broadband :-). Associated with this is how to get your olde tapes onto CD.

Goonology (the study of Goons) is central to my love of “The Goon Show”, which for you plebs out there was a radio show which started in obscurity in 1951, gained immense popularity by 1954, and ran until 1960, with an odd show after that. All the creative Genius of Spike Milligan, Harry Seacombe and Peter Sellers. A perfect extract of the typical humour is found in this mp3 snippet. The depth of the humour is phenomenal.

Hobbies include Home Brewed Ale, Ponding, Gardening, Aviculture, and Birding. I have also collected daily rain statistics since 1990 odd.

## Personal Stuff

Marriage is wonderful institution, March 1988 being the start of it all. Just to complete the numerical symmetry, 1999 was *the year*, the 23rd October bringing about Robert James Clark's entrance into our cosy 11 year-old marriage. He's great, he has taught me many things. Like how my mouth physiologically could not stay shut when spoon-feeding him. Dinkum. Its Impossible... Try it!! Also: how to return to my student days of having no sleep and getting away with it.....I'm too bloody olde for this game!

A major learning curve has been the way in which he has taught me about my (personal) relationship with God. We are such fools always, and the combination of marriage and fatherhood has been exceptionally instructive in my educational process!

Of further and greater instruction is the arrival of Kathleen Brenda Clark on the 18th June 2001, my 37th birthday, just when we were settling into a rather nice routine with Robert. With only a 20 month gap, we are having some fun!

Ten years on now, and we are still having a lot of fun homeschooling them :-)

I have also made at attempt at presenting my Digital Camera pics.

Over the years I have built up a number of favorite recipes.

During the Gulf War (Version 1.0, it appears I now need to add), I found that there was a greater apparent necessity to watch a live Scud Raid on Tel Aviv, than to spend time talking to the wife, and I chucked the TV, hence I find time to read. Favorite authors include: God, C.S. Lewis, J.K. Jerome, J.R.R Tolkien, C .Dickens, J.B. Priestly, L. Wallace, G. Edwards, S. Vanauken, F. Peretti, P. Wilcock, J. Wimber, T. Huddleston, A. Paton, S. Milligan!, Homer!!!(a recent addition), T. Pratchett.

## Links

Professional societies of interest are: The Applied Computational Electromagnetics Society (ACES), based in the Naval Postgraduate School in beautiful Monterey, California. This is the primary society for my research field, and is infinitely useful to me. Both the Journal and Magazine are very useful. Sadly now, too expensive to maintain a personal subscription.

The Institute of Electrical and Electronic Engineers (IEEE) based in the States. I am a member of the Antennas and Propagation Society within the IEEE, and this too is of exceptional use to me professionally. The Journal is classically academic and mathematical, making it largely useless to an idiot like me. The A&P Magazine, however, is perhaps the best publication I get. (got, Costs have forced me to go the "electronic subscription" route. However, there is no computer in the loo.....)

The Institute of Electrical Engineers, based in the UK. Excellent society with very informative Magazines which tend to focus on tutorial material, but without being patronizing. Truly Excellent. The IEE morphed into the IET, lost its way, and again became far too expensive to maintain a personal subscription on a lecturer's salary!

The South African Institute of Electrical Engineers

## Bookmarks

Current bookmarks are updated every so often!