

Being an IBL Research Assistant at CAIA

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Overview



- What is IBL?
- What is CAIA?
- Why choose CAIA?
- My role as a Research Assistant
- First Impressions
- Skills Acquired, Developed & Practised
- Impact of this opportunity on me
- Future perspective
- Conclude & many thanks

What is IBL?



Industry Base Learning -

- Undergraduates gain experience relevant to their studies.
- Growth and personal development
- Tests current knowledge and abilities.
- Increase and refine skills
- Ideas on possible career pathways.
- It gives a break from studying.

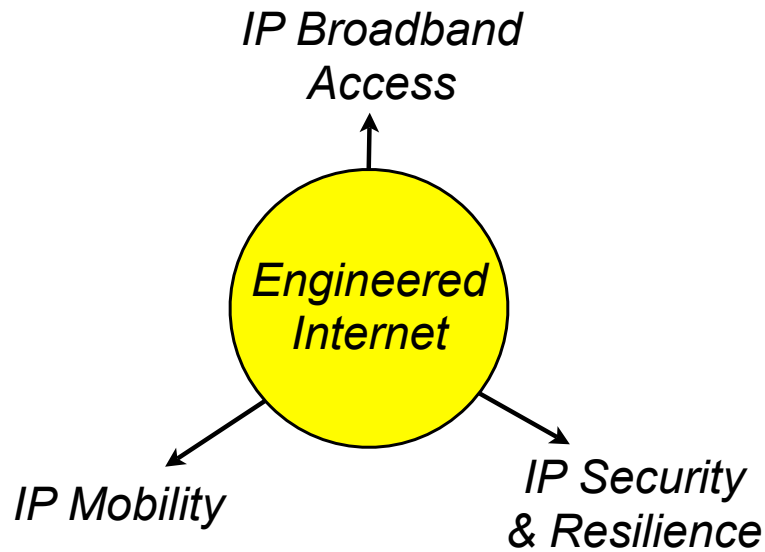
What is CAIA?



Centre for Advanced Internet Architectures (CAIA)

“Is an established world-class Centre of Research Excellence in Internet engineering techniques, IP infrastructure protocol development and analysis, and next-generation IP service delivery architectures.”

Industry Related Programs



Why do IBL at CAIA?



- A Challenge
- Further develop interest/knowledge in IP Networking.
- Interesting Projects (G.E.N.I.U.S, B.A.R.T)
- Be part of Industry-level Research
- Observe Postgraduate Research
- International Reputation (Publications)

My role as a Research Assistant



- Design and implement network experiments
- Gather data, analyse and prepare results.
- Write up my work.
- Assist in related research projects assigned by Grenville.

First Impressions



- Frustrating (Had to self learn some skills)
- A lot of work (brain going to explode)
- Felt like I had bit more than I could chew
- Definitely challenging
- I had to adapt (to FreeBSD operating system , working environment, waking up early)
- Intimidated by the level of knowledge by coworkers .

Skills Acquired, Developed & Practised



Self learning

- Had this skill developed in my early years of Uni.
- Left in the deep end.
- Relying on myself to find the answers.
- Learning FreeBSD and Unix.
- Programming

Skills Acquired, Developed & Practised



Programming Skills

- Previously have learnt Java and C++ at Uni.
- Introduced to Python (www.python.org)
- Shell Scripting (BASH, C Shell)
- R (www.r-project.org) - Analysis tool

Skills Acquired, Developed & Practised



Organisation and Time Management Skills

- Previously juggled studying and working part time.
- I would have multiple tasks assigned to me and would need to prioritise work.

Skills Acquired, Developed & Practised



Multimedia Skills

- Website design (Macromedia Dreamweaver) : CAIA, SIT-CRC, Games page, News page
- Image Manipulation (Adobe Photoshop, Macromedia Fireworks)

Skills Acquired, Developed & Practised



Writing Skills

- Learning the processes of writing and creating reports (brainstorming, gathering data, drafts, proof reading)
- Co-authored two tech reports. (<http://caia.swin.edu.au/reports/>)
- Useful skill to have in the later stages of my Uni career.
- I definitely need to improve and develop this skill.

Skills Acquired, Developed & Practised



Presenting Skills

- Little experience in public speaking and presenting prior to CAIA.
- Research results conducted at CAIA are presented in seminars.
- <http://caia.swin.edu.au/seminars.html>

Skills Acquired, Developed & Practised



Working in and interacting with team members.

- Previous experience of group work in studied subjects.
- Everyone has a role and everyone needs to work together to obtain the goal.
- Developing communicational skills.

Impact of working at CAIA



- FreeBSD operating system - I use it at home
- Analytical skills have improved
- Persistence and stamina when working
- Appreciation of what researchers actually do
- Opened my eyes to many more pathways after University (Honours, PhD, Masters)

Impact of working at CAIA



- Skills learnt at CAIA are an advantage in my undergraduate degree.
- Appreciation of Uni life compared to working full time.
- I now have a stronger will to learn/study more.
- Confidence in myself and my abilities

Future Perspective



- 2.5 years left of studying (Plenty of pondering and learning time)
- I could follow the path of research (Honours, PhD, Masters)
- Possibly apply for Internships at CAIA for more experience.

Recommendations to CAIA



- IBL students & interns should get the fastest computers and graphics cards in the lab. Work related to the G.E.N.I.U.S project will be greatly enhanced.
- No recommendations needed for CAIA. CAIA has been an excellent placement where I have learnt so much.

Recommendations to IBL Program



- Students should learn Unix before coming to CAIA.
- Placements should be given a challenge/difficulty rating.

Conclude & Many Thanks



- Hard long year but definitely worth the effort
- I'll never forget this kind of experience
- To the [LPB], {seamen} and chown team. Its been great working as a team.
- To all CAIA staff that have helped me and who I have become friends with.

Special Thanks



Special Thanks to Grenville Armitage for letting me gain a proper IBL experience at CAIA.

Questions?

