

INDUSTRY EXPERIENCE APPRAISAL

John Citizen

I was employed by Electronic Engineering Pty Ltd for a 12 week duration, commencing from 6 September 2004 to 3 December 2004.

Whilst at Electronic Engineering I was involved in the following tasks:

- Performing a reliability analysis for new electronic computer hardware using MIL-HDBK-217E. This analysis was part of a major research and development project and involved calculating the reliability for the individual components in the hardware, specified in the handbook.
- Creating, amending and updating documentation for a voice communications system project for another Authority. To achieve this Microsoft Word for Windows and Microsoft Excel was used. It was through this activity that I gained the most experience in using both software packages.
- Designing a voice detection circuit from specification stage through to prototyping. This circuit was to be used in a large defence systems project. This task was broken down into various stages, the first being to establish the specifications for the voice detection circuit. Once the specifications were determined an initial circuit was designed and the schematic constructed using Protel. The circuit was then constructed on a bread board then tested. The circuit design was continually modified, constructed and retested until it met the specifications. The Protel schematic being updated accordingly. A printed circuit board was then constructed for a final design and tested. This task familiarised me with the steps needed to realise a circuit from the initial concept to the final product. It provided experience with using Protel, referring to databanks, soldering components and using electronic test equipment such as multimeters and CRO's.
- The final task I was involved in was to create a comprehensive database system to enable the administration of an Electronic Engineering maintenance contract with another Authority. I had never before created a database so this was a good learning experience. The software package Microsoft Access was used to create the database. However, before creating the database I had to completely familiarise myself with the maintenance contract and thus received an insight in to how Electronic Engineering Pty Ltd organised their records in regard to the receiving and despatching of goods. In addition to creating the database, I also had to develop documentation outlining its operation. The documentation was written using Microsoft Word for Windows and so that it conformed to other documents written for the company, the standard document template for Electronic Engineering documents was used.

Electronic Engineering Pty Ltd comprises research and design, maintenance and administration departments. Through the various tasks I performed I become familiar with the way a company keeps track of all its paperwork and project. Electronic Engineering deals mainly with touch screens, and through their major projects I was able to see how the use of touch screens could be used in a wide variety of application through their contracts with several Authorities.

My stay at Electronic Engineering Pty Ltd was an enjoyable one as my tasks involved both software and hardware work, and I also found the staff to be both friendly and helpful. I was interested in the company organisation structure and pleased with the team approach the company used in its workplace.