

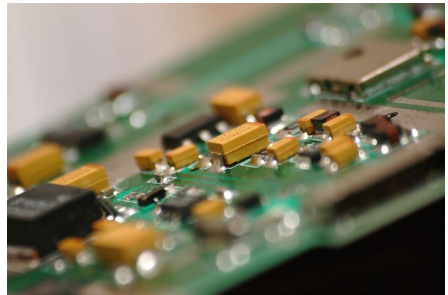
# Software development for reconfigurable hardware environments

## Project description

In recent times there has been an increase in use and capabilities of reconfigurable computing platforms. While, as a non-conventional platform, these may not be used as flexibly in supporting standard software systems, there are potential efficiencies in targetted Space, Weight and Power–Cooling (SWaP-C) footprint and better processing performance.

In this project, we are interested in exploring capabilities of non-conventional platforms for minimising SWaP constraints, and capabilities for maximising performance. It will also identify candidates for the research and development of automatic software code deployment. Specifically it will look at the application of these new non-conventional computing platforms within a resource constrained environment (i.e. combat system) and develop techniques and tools to enable the automatic deployment of high level language applications onto such platforms.

This will include understanding pedigree, capabilities, execution methodologies, build and test tools, hardware architectural options (such as standalone or blended processor) and available implementations.



## Student Attributes

- You might have an interest in the interface between computer science and electrical and electronic engineering, specifically programming models and approaches for reconfigurable hardware.
- You might have an interest in language design and language translation including support for automated language translation.

## More Information

<http://blogs.adelaide.edu.au/cdit/>

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