

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
In Orbit - Postgraduate Space Education (4)

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UNIVERSITY BASED ROCKETRY PROJECTS; EXAMINING THE CONDITIONS THAT MAKE
THEM THRIVE**Abstract**

This presentation will be centered on the reflection of the authors' experiences in leading undergraduate and postgraduate student groups to the design, manufacture, and testing of large university based rocketry projects based in Australia. The authors have been involved in rocketry projects across multiple universities and will share their experiences directly.

Primarily this talk will be an introspective discussion on the leadership, organisation, and student involvement of a university project; The design, build, and fire of a 4 kN additively-manufactured gaseous CNG/GOX rocket motor featuring a multi-chamber aerospike nozzle, which will conclude in 2017.

Part of the presentation will be dedicated to the discussion of the role of industry collaboration and how they can assist, focus, and direct such projects. It will also examine the role of support on behalf of the university as well as from engineering faculties.

The conclusion of the presentation will be to discuss the necessary environment that allows complex and relatively large university rocketry projects to thrive and student involvement to prosper.