

Dear Sir,

We, the IPSA One team, are greatly honoured to have been selected by the RAeS Paris Branch to submit the attached paper to the 2018 N.E Rowe competition.

IPSA One is a non-profit student association, set up at the Institut Polytechnique des Sciences Avancées (IPSA) based at Ivry-sur-Seine, just outside Paris, and is tasked with the development of a cubesat nanosatellite called Aragosat-1. The objective of the Aragosat-1 mission is to prove the practical feasibility of miniaturized electric propulsion for small spacecraft. The Aragosat-1 programme began in late 2016 and is expected to run until at least 2021, when other follow-up projects will begin if the mission is a success.

At the event organised by the Paris Branch to select the entrant to the N. E Rowe competition that took place on April 26, 2018, the IPSA One team chose to present the progress on the Aragosat-1 project (see attached PDF). The three presenters were supported by a dedicated tool they had built especially for that purpose, exploiting artificial intelligence (AI) techniques. This tool was given the sweet name of ANNA : Administration Network for Nanosatellite Association.

During the presentation, it turned out that ANNA did not always behave as was expected, on some occasions humorously misbehaving, so the ONE management team supervising the engineering team requested that they produce a report on the anomalies that arose, and the solutions proposed to resolve the problems.

It is this issue report, identifying each of the problems encountered when interacting with ANNA during the presentation of the Aragosat-1 project, that IPSA ONE has chosen to submit to the N. E. Rowe competition.

Thank you for your attention.

Yours faithfully,

Chris de Claverie
IPSA ONE Co-founder