

## Open Source CubeSat Workshop 2019



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### **EQUiSat: Space for \$3,776.61**

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As electronics decrease in size and complexity, CubeSats have become more popular and more accessible than ever. Thousands of high schools, universities, companies, and hobbyists have launched or are working on CubeSats. However, the industry is dominated by premade modules that sell for massive markups, meaning that cost is still a barrier to entry for many groups. EQUiSat, a 1U CubeSat designed and built by Brown Space Engineering, an undergraduate club at Brown University, aimed to change that. Costing only \$3,776.61, with a reproducible, completely open source design using off-the-shelf electronics, EQUiSat's successful launch and deployment proves that anyone can make their own satellite. Operating nominally for more than six months at the time of writing, it has produced significant amounts of data for its secondary mission: testing LiFePO<sub>4</sub> batteries in space for the first time. This data corresponds to testing on the ground, giving developers of future satellites the confidence to use them.

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