

BITS Pilani team excels in aerospace innovation

Introducing artificial intelligence into aviation



Team members of Project PINAKA with mentor professor Shibu Clement.

#TGLIFE

Project PINAKA, a team of motivated student engineers from BITS Pilani, K K Birla Goa Campus, was declared winner at recently concluded Boeing University Innovation Leadership Development (BUILD) program.

The team mentored by prof Shibu Clement, associate professor, department of mechanical engineering, working to introduce artificial intelligence into aviation included: Saksham Agrawal, Kshitij Chhabra, Harshwardhan Shirodkar, Devanshu Wakhale, Srisreyas S, Harshvardhan Chandirasekar, Bharat Gupta, Prithvi Ramesh, Shambhavi Singh, and Devansh Gupta.

Six winning teams, three student teams and three teams among early-stage start-ups were selected from 26 finalist teams. The program attracted a record number of entrants, many from tier II and III cities, with more than 850 student and early-stage innovation teams applying from across India. A total of 82 teams were shortlisted through a stringent evaluation process to enter the program's regional boot camps.

The team innovated solar endurance UAV which is an artificially intelligent autopilot system which is being made to be deployed on electric fixed wing drone. An array of sensors are placed in different configurations, this data is fused together and processed by an artificial intelligence system which then predicts wind patterns. The post processing system then uses this data to enter air streams to conserve energy. So far the team has made one prototype to collect test data.

The BITS teams entered Boeing BUILD competition four months ago and since then Boeing has provided students rigorous training in understanding the entrepreneurial process along with business modelling. Students passed through five stages of the competition where two rounds were interviews with the jury and two rounds were regional and national level pitch competitions.