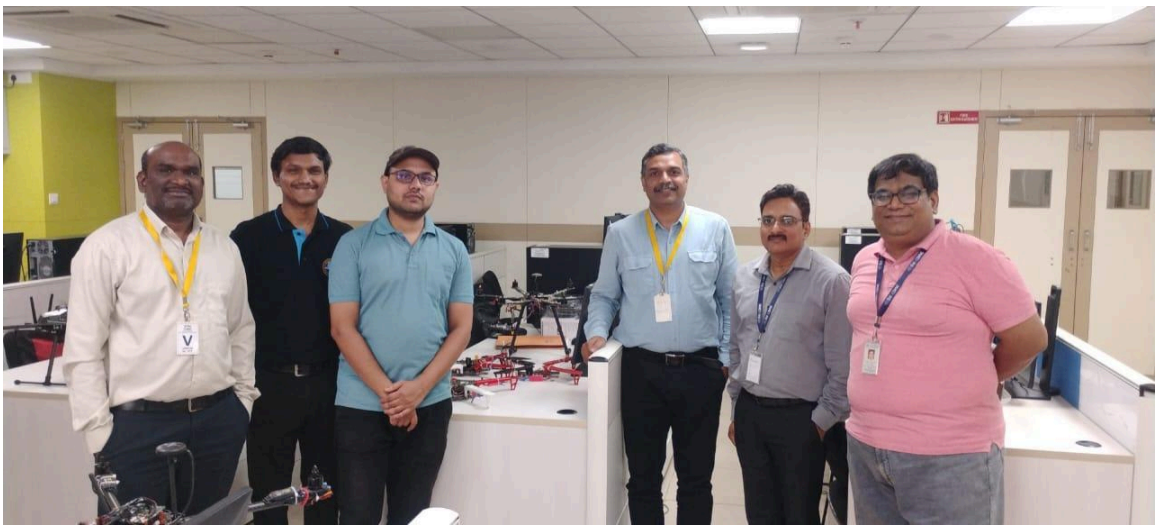
Industry Visit Report: Centre for Development of Advanced Computing (C-DAC) and DRONE Acharya Aerial Innovations.

For the development of a drone lab for CoE AI, we had the opportunity to visit the Centre for Development of Advanced Computing (C-DAC), India's premier R&D organization under the Ministry of Electronics and Information Technology (MeitY). C-DAC has played a pivotal role in strengthening the nation's technological capabilities, starting with the indigenous development of supercomputers under the PARAM series in 1988. Over the years, C-DAC has diversified its expertise in various domains including Indian language computing, applied electronics, health informatics, and high-end IT solutions, while also contributing significantly to human resource development through its education and training initiatives since 1994.

During the visit, special emphasis was given to C-DAC's latest project, "Capacity Building for Human Resource Development in Unmanned Aircraft System (Drone and Related Technology)", a collaborative effort involving IIITDM Kurnool and NIELIT. The Post Graduate Diploma in Unmanned Aircraft System Programming (PG-DUASP) being offered at multiple C-DAC and NIELIT centres focuses on both theoretical and practical aspects of drone technology, including UAS design, DGCA guidelines, sensor integration, IoT applications, GIS, data analytics, and drone-based solutions for real-world applications such as agriculture, healthcare, and infrastructure inspection. The visit provided valuable insights into the nation's commitment to building skilled manpower in cutting-edge technologies and highlighted C-DAC's crucial role in driving technological self-reliance.



Visit to CDAC Pune

DRONE Acharya Aerial Innovations.

We also explored the offerings of DroneAcharya Aerial Innovations, an independent academy dedicated to providing specialized drone training and skill development programs. DroneAcharya is known for its industry-focused training, including DGCA Certified Drone Pilot Training, Train the Trainer (TTT) courses, Aerial Cinematography, GIS for Drone Data Processing, Drone Building, and Drone Applications in Agriculture. The academy further offers advanced programs in Python for GIS, LiDAR & GIS integration, Disaster Management using drones, and Drone Racing. DroneAcharya plays a vital role in strengthening the drone ecosystem by offering hands-on, practical training that prepares participants for various drone-based industries and real-world applications.

Visit to Dornacharya

Our Recommendations:

1. MoU with Dronacharya as a training partner due to their variety of courses in drones.
2. CDAC can conduct Boot Camps in Drone Training
3. Resource persons from CDAC and Dronacharya can be used.
4. At CoE, a set of training drones for beginners, drones for engineering students, agri-drones, a surveying drone, and FPV drones are to be added, along with simulation software.
5. PARAM Shavak can be evaluated for computing resources at the AI center.

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