



T-BAT Advanced Engine for Aerial Autonomy



T-BAT is an advanced, real-time vision-based software solution for video registration, localization and designed for navigation in GNSS-denied environments. Powered by unique, industry-leading algorithms, T-BAT is operationally proven.

T-BAT offers a range of unique features such as extraction of precise 3D coordinates, platform recovery and auto-landing for enhanced operational efficiency.

T-BAT is hardware and sensor agnostic and can be installed on edge computing, COTS PC or cloud service.

T-BAT Features and Capabilities



Localization Products

- Localization
- Visual based navigation
- Auto landing, point-cloud landing zone analysis
- Obstacle avoidance



Mission Products

- Video registration
- 3D-coordinate extraction
- Real-time vision-based point cloud



Sensors

- Sensor agnostic - Works with any payload
- Raw video or compressed
- Stabilized or fixed



Environment

- Edge computing including NVIDIA Jetson family
- COTS PC
- Cloud based



Performance

- Real-time
- Low power computing resources
- Designed for CPU-only or CPU/GPU configurations



Seamless Integration

- Integrates seamlessly with any platform
- Pixhawk ready
- Standard formats

About Tiltan

Tiltan Software Engineering Ltd. is a leading solution provider specializing in Simulation, 3D Engines, Generative AI Training, Geo-Systems, 3D Content, and Operation Center Systems and Tools.

With over 30 years of experience, Tiltan's simulation products provide a one-stop-shop solution for training, development, and hardware-in-the-loop systems, powered by a proprietary 3D engine and Generative AI.

Our Geo-System products support space, aerial, manned, and unmanned vehicles, addressing registration, localization, and navigation challenges, as well as geo-mapping systems.

Tiltan's in-house content production delivers high-fidelity, geo-specific visual databases, 3D models, and mapping data for VIS, IR, LIDAR, and SAR applications.

Tiltan is driven by a commitment to customer success, excellence, and innovation, ensuring our solutions meet the highest standards of performance and reliability.

