

Mission-Ready Autonomy for Complex Underwater Environments



MicroGenesis delivers end-to-end AUV software enabling fully autonomous underwater missions in GPS-denied, low-visibility, and unstructured seabed conditions



What We Enable

- ✓ Autonomous mission planning & execution
- ✓ Real-time obstacle detection & avoidance
- ✓ Intelligent 3D terrain-following navigation
- ✓ Multi-sensor fusion for reliable underwater positioning
- ✓ Autonomous safety, failsafe & recovery
- ✓ Side Scan Sonar (SSS) data processing



Why It Matters

- ✓ Operates without operator intervention
- ✓ Handles complex terrain & hazard scenarios
- ✓ Optimized for long-duration, unattended missions
- ✓ Simulation-driven validation reduces deployment risk
- ✓ Modular & hardware-agnostic architecture



Key Applications



Seabed survey & bathymetry



Underwater inspection & reconnaissance



Scientific & environmental monitoring



Defence & strategic underwater missions

Let's Connect to Discuss Your AUV Autonomy Needs

We'd be glad to explore how our software stack can support your upcoming underwater missions.