

### Aquatic-Data Profiler

**Technology Description:**

The innovation introduces a programmable, autonomous, sub-surface water data profiler that is lightweight, efficient, and user-friendly. It allows users to easily program and deploy the profiler to collect sample data at different water depths. With its low-cost design, the profiler features a depth control system for multiple dive and surface trips, an Android graphical interface for convenient Bluetooth programming, and a deployable antenna for easy retrieval after completing its mission. The collected data is efficiently obtained using an open-source Android interface and Bluetooth programming, making it accessible to anyone monitoring water conditions in ponds, lakes, oceans, or even pools. This innovation offers a cost-effective and user-friendly solution for sub-surface water data collection.

**Inventors:**

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**Applications:**

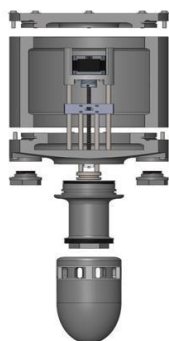
- Environmental Monitoring
- Disaster Management
- Infrastructure Inspection

**Benefits:**

- **Data Collection Efficiency:** The profiler allows for efficient and accurate collection of water data at various depths. It can be easily programmed and deployed, reducing the need for manual data collection efforts. This improves efficiency and saves time and resources.
- **Cost-Effectiveness:** The low-cost design of the profiler makes it an affordable solution for water data collection. Its efficient deployment and data retrieval mechanisms further contribute to cost savings.
- **User-Friendliness:** The profiler features a simple-to-use interface, making it accessible to a wide range of users. The Android graphical interface enables easy programming and control, while Bluetooth connectivity simplifies data transfer and communication.

**Patent Status:**

US Patent Pending (18/555489)



*Aurelia Autonomous Profiler*

**For more information:**

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