SensiML™

Transform Your IoT Device —
From Merely Connected to a Truly Intelligent Endpoint

Cloud

Endpoint

Cloud

– High Power Consumption
– High Latency
– Remote Intelligence

– Power and Bandwidth Optimized
– Local Real-time Intelligence

Build Intelligent Endpoints Quickly and Easily — From Start to Finish

| Raw Signal Capture | Data Insight Labeling | Algorithm Generation | Firmware Code Generation | Test/Validation and Support |
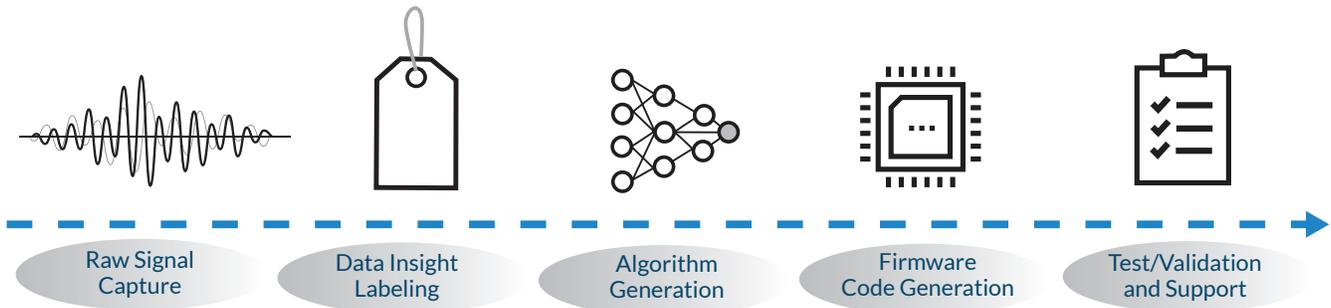
Significant Benefits for Both Product and Development Process

- **Significant TTM Gains:** 5x faster sensor algorithm development over AI/ML expert hand-coding
- **Optimized AI, No Experts Required:** Data science built into tool usable by mainstream developers
- **Code that Runs on MCUs not CPUs:** Enabling practical AI application on embedded wireless IoT device
- **Power Efficiency on Multiple Levels:** Smart compilation with auto-gen MCU, DSP, and FPGA optimizations
- **Extensibility and Flexibility:** Add algorithms, change HW targets, customize resulting code, and more
- **Proven Solution:** Initially launched in 2016 as Intel™ Knowledge Builder, now greatly expanded

Applications

SensiML Toolkit enables AI for a broad array of resource constrained time-series sensor endpoint applications. These include a wide range of consumer and industrial sensing applications. Our growing library of data transformation and pattern recognition libraries can condense voluminous data streams into the kernels of real-time insight that actually matter. Whether sourced from accelerometers, load cells, strain gauges, microphones, gyroscopes, passive IR, body electrodes, voltage, or current measurement, the approach and endpoint intelligence benefits are the same.

Industrial Monioring

– Anomaly detection
– Process excursions
– Predictive maintenance
– Process control

Safety Wearables

– Gesture recognition
– Activity monitoring
– Contextual awareness
– Environmental monitoring

Smart Appliance

– Process monitoring
– Voice control
– Audio event detection

Sports/Fitness Wearables

– Activity classification
– Gait analysis
– Form and performance assessment

Toolkit Components

SensiML Data Capture Lab

- Train/test data collection
- Data labeling and metadata annotation
- Video annotation tools
- Auto segmentation and triggering
- Multi-user project collaboration
- Automated data management
- Windows™ and Android™ versions

SensiMLData Capture Lab Screen

SensiML Analytics Studio

- Server based AI code-generation engine
- Classic ML classifiers thru xNN algorithms
- Automatic or Directed Feature Engineering
- Simple GUI and Python expert interfaces
- Cloud Service and Private Server options

SensiML Test App

- Test tool for model validation on device
- Real-time and logged collection
- Rich visualizations and debug info
- Windows and Android versions

Support Options

Basic Cloud SaaS Subscription: SensiML baseline cloud subscription service offers plenty of examples, video tutorials, knowledge base articles, and online and community support access.

Enterprise Level Support: Beyond Basic Cloud SaaS, Enterprise Level Support (ELS) provides defined Service Level Agreement (SLA) support response, on-site and customized workgroup training, and options for direct SensiML engineering access.

Private Server Support: For those customers preferring private server implementation, this is available on an annual commitment basis with renewable yearly maintenance and enterprise support provisions.

For more information visit **www.sensiml.com** or email **info@sensiml.com**