

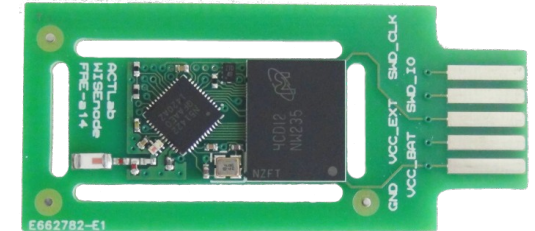
## WISEnode Game Controller

The **W**earable **I**ertia **S**ensing Node (WISEnode) is an embedded module developed at ACTLab. The node features a 9-DOF inertial sensor, different light sensors, 512MB flash and a wireless interface, making the node ideally suited for context recognition and motion analysis for live and long-term data recordings.

The goal of this project is to transform multiple WISEnodes into unconventional game controllers for emulated Nintendo 64 games like Mario Kart or Wave Race. You have full freedom of choice regarding the shape of the controller.

Basic gesture recognition will be required to compensate for missing buttons. A Bluetooth Smart USB stick will be used to interface WISEnodes with a PC running the Nintendo 64 emulator. Motion data can be processed on both devices, however, computational capabilities and latency must be kept in mind.

Finally, you will present your results in a short multi-player live demo.



Project type	B.Sc. / M.Sc. seminar
Starting date	2016 summer term
Work distribution	20% experiments, 20% theory, 60% programming
Useful knowledge	<ul style="list-style-type: none"><li>• Attended course Mustererkennung und Zeitreihenanalyse</li><li>• Intermediate knowledge of C/C++ and Python / Matlab</li></ul>
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