# Cooperative Research Projects

## "SEAMAL BMS“ SEcurely Applied MAchine Learning - Battery Management Systems

The objective of the SEAMAL BMS project is to create concepts and develop the next generation of a universal connectivity module for cost-effective use in smart and safe battery management systems (BMS). The goal for this project is to provide advancements for these systems to be used in electric vehicles for optimal use of battery resources and range optimization.
This project is co-financed by the European Regional Development Fund (EFRE).


## "SEAMAL IPCEI" SEcurely Applied MAchine Learning - Important Project of Common European Interest

In the IPCEI ME, NXP Semiconductors Austria focuses on hardware-based solutions for secure and reliable implementations of energy-efficient chip platforms in smart access applications. The project supports the further expansion of the R&D competence center in Gratkorn near Graz and enables a stronger emphasis on the topic of security in the European IPCEI consortium.




A further selection of currently active projects is shown below. Please do not hesitate to contact us for further information or if you have interest to cooperate with NXP.

| Project | Scope | Funded by |
|---|---|---|
| AWARE | **Hardware Ensured Software Security** | FFG Forschung wirkt. |
| CD Labor Digidow | **Private Digital Authentication in The Physical World.** | Christian Doppler Forschungsgesellschaft |
| CD Labor Localization | **Trusted Localization for Keyless Access Systems.** | Christian Doppler Forschungsgesellschaft |
| Enhance UWB | **Benchmarking and advancing localization and communication performance of UWB systems in harsh environments** | FFG Forschung wirkt. COMET Competence Centers for Excellent Technologies |

| Project | Scope | Funded by |
| --- | --- | --- |
| FERMION | **Formal Verification of Masked Hardware Implementations.** | FFG Forschung wirkt. |
| Inno EBS | **Interdisciplinary knowledge transfer in Electronic Based Systems (EBS).** | FFG Forschung wirkt. |
| InSecTT | **Intelligent Secure Trustable Things.** (Link) | FFG Forschung wirkt.<br>ECSEL Joint Undertaking<br>Electronic Components and Systems for European Leadership |

| Project | Scope | Funded by |
|---|---|---|
| Reindeer | **REsilient INteractive applications through hyper Diversity in Energy Efficient RadioWeaves technology.** (Link) | HORIZON 2020 |
| SAL WINGARDIUM | **Secure Ultra-Wide-Band Gesture Detection and Angle of Arrival Estimation.** | Bundesministerium Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie<br>Das Land Steiermark<br>SFG NEUES DENKEN. NEUES FÖRDERN. |

| Project | Scope | Funded by |
| --- | --- | --- |
| SEAMAL BMS | **SEcurely Applied MAchine Learning – Battery Management Systems.** |  |
| SEAMAL Front | **SEcurely Applied MAchine Learning – Frontrunner. Machine Learning based next generation UWB secure car access IC platform.** |  |

| Project | Scope | Funded by |
|---|---|---|
| SEAMAL IPCEI | **SEcurely Applied MAchine Learning - Important Project of Common European Interest - Energy-Efficient Chips** (Link) | |
| Tex-Hype | **TEXtile integrated HYbrid Printed Electronics** (Link) | |