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Optimised mathematical library for Atmel microcontrollers.

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Microcontroller units often are essential parts for experimental setups and automatic control. Since the simplifications of the programming platforms, the microcontrollers have become accessible to a large spectrum of researchers, also with limited knowledge of the microcontroller systems.
Over a plug and play philosophy, the simplification pertains to the software realisation since many functions are available. The users often consider the software library a black-box object, and sometimes improper use of the library can result in a failed system. Some of the available libraries for mathematical calculation are not well optimised in terms of algorithm and memory management. In this work, a well-optimised library for the Atmel microcontroller is presented. The library presented is optimised for matrix calculation and memory optimisation.

Apply to be considered for a student ; award (Yes / No)?

No

Level for award;(Hons, MSc, PhD, N/A)?

N/A

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