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The ASTRI Camera control software of the ASTRI SST-2M prototype for the Cherenkov Telescope Array

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Within the framework of the Cherenkov Telescope Array (CTA) observatory, the Italian National Institute for Astrophysics (INAF) is leading the "Astrofisica con Specchi a Tecnologia Replicante Italiana"(ASTRI) Project mainly devoted to the definition and development of a set of small-size class telescopes under dual-mirror optical design (SST-2M) for the CTA southern site. The prototype of such telescopes, named ASTRI SST-2M, is installed in Italy at the INAF "M.C. Fracastoro" observing station located in Serra La Nave, Mount Etna, Sicily. In addition to the dual-mirror optical design based on the Schwarzschild-Couder configuration, the ASTRI SST-2M telescope adopts a focal plane camera formed by an array of monolithic Silicon Photomultiplier (SiPM) sensors coupled with a specifically designed Front-End Electronics (FEE) and Back-End Electronics (BEE) that represent a further innovative solution for the detection of atmospheric Cherenkov light. The ASTRI SST-2M prototype is currently under completion of the overall commissioning phase: structure, mirrors, camera, control software, data archiving and analysis pipeline. This contribution focuses the attention to the software devoted to the control and monitoring operations of the ASTRI camera. We will provide a brief description of the electronic assemblies and of the software architecture designed, according to software engineering modularization, in terms of functional blocks and how they are deployed in the BEE. Then, we will show how all these functionalities are accessible by the user through the Graphical User Interface (GUI) developed and currently used for the engineering tests performed on site.

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