b-plus develops “pandaset2bag” for free use in ros2 environment of 5GNPR research project

Press release

**Deggendorf, April 17, 2023 – In the research project 5G in the National Park Region (5GNPR) funded by the Federal Ministry of Digital Affairs and Transport, b-plus technologies GmbH is equipping a planned automated bus shuttle with additional sensor technology and a high-performance edge node (vehicle computer). With "pandaset2bag", b-plus now makes a library for using the "PandaSet" dataset in the ROS2 environment freely available on GitHub.**

In the research project, technologies around the 5G mobile radio standard are being pushed forward. Various fields are being researched and prototyped in the thematic areas of "Mobility, Transport and Tourism", "Forestry and Nature", "Rescue and Health" and "Smart Infrastructures". b-plus technologies is equipping the bus shuttle with sensors such as cameras and lidars. With the use of this additional sensor technology, the bus becomes a "moving sensor".

A subtask in the project, which started in January 2022, is the more advanced algorithmic environment perception based on the additional camera and lidar sensors. To ensure the earliest possible start of the AI-based algorithm development, the use of a suitable, annotated and freely available real data set was investigated in addition to the analysis of a simulation approach based on CARLA. The choice fell on the "PandaSet" dataset, which has similarities to 5GNPR in sensor setup.

For seamless use of the "PandaSet" dataset in the development framework ROS2 (Robot Operating System 2), which is used on the Nvidia Jetson based edge node, a conversion of the PandaSet format into ROS2 format is necessary. This conversion is now provided by b-plus technologies GmbH in the form of the library "pandaset2bag" on GitHub for free!

More information about the research projects, technologies and solutions of b-plus can be found at b-plus.com.

More information about b-plus Group, its technologies and solutions at [b-plus.com](https://www.b-plus.com/en/home?mtm_campaign=2300_Basic&mtm_medium=PM&mtm_content=Forschungsprojekt).

Links:

* <https://www.b-plus.com/de/newsroom/news/detail/b-plus-technologies-teil-des-forschungsprojekts-5g-in-der-nationalparkregion>
* <https://pandaset.org/>
* <https://www.ros.org>
* <https://carla.org/>
* <https://www.nvidia.com/de-de/autonomous-machines/embedded-systems/>
* Github: <https://github.com/bplus-group/pandaset2bag/>

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ABOUT B-PLUS GROUP

The b-plus Group is with more than 230 employees an international leading development partner for advancing technologies in the fields of autonomous driving, driver assistance systems and the automation of mobile machines. With its development tools, automotive software and mobile automation divisions, it offers its customers a wide range of measurement technology, software and hardware.

As a long-term partner, b-plus accompanies its customers from the identification of the problem to the implementation of the development solution and beyond. The teams at the Deggendorf, Regensburg, Cham and Lindau locations work hand in hand to provide comprehensive and holistic solutions.