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| I started today's work by integrating my "Isolation Forest"-based anomaly detection algorithm from yesterday with CUDA. This aimed to significantly improve the algorithm's performance and enable processing larger datasets in a shorter time. After the CUDA integration, I achieved better results and speed gains compared to CPU-based execution.  Next, using a deep learning–based approach, I first created a training dataset from the available sample sensor data. By dividing the data into hourly time intervals, I examined temperature distributions specific to different parts of the day in more detail. During training, to allow the model to distinguish natural temperature variations throughout the day, I analyzed the days by dividing them into time intervals such as morning, noon, afternoon, evening, and night.  In the testing phase, I observed that the model still detected low-variation values as anomalies in some time intervals. Specifically, the fact that values like 30°C, which are high but frequent in the dataset, were sometimes falsely flagged as anomalies at night indicated that the model still did not achieve sufficient time-sensitive adaptation. Therefore, I tried to reduce the model's oversensitivity by increasing the anomaly threshold by 20%. | | | |
| **Sayfa No** | **Çalışmanın** | | **KONTROL** |
|  | Konusu :.........................................  ......................................................... | Yapıldığı Tarih  ...../..../202.. | ......................................  ...................................... |