

Title: Base station power estimation method

Generated on: 2026-04-27 13:32:44

Copyright (C) 2026 GAE CONTAINERS. All rights reserved.

---

In this thesis linear regression is compared with the gradient boosted trees method and a neural network to see how well they are able to predict energy consumption from field data of 5G ...

Based on this method, a software platform for power estimation is developed. The proposed method models power consumption on different abstraction levels by splitting a ...

Measurements show the existence of a direct relationship between base station traffic load and power consumption. According to ...

Based on this utility function, an aggregated control method is proposed, including real-time available power estimation and model predictive control (MPC) for the gNBs-cluster, ...

To address this, we propose a novel deep learning model for 5G base station energy consumption estimation based on a real-world dataset. Unlike existing methods, our approach integrates ...

Power consumption models for base stations are briefly discussed as part of the development of a model for life cycle assessment. An overview of relevant base station power ...

Website: <https://www.gaeconsultants.co.za>

