

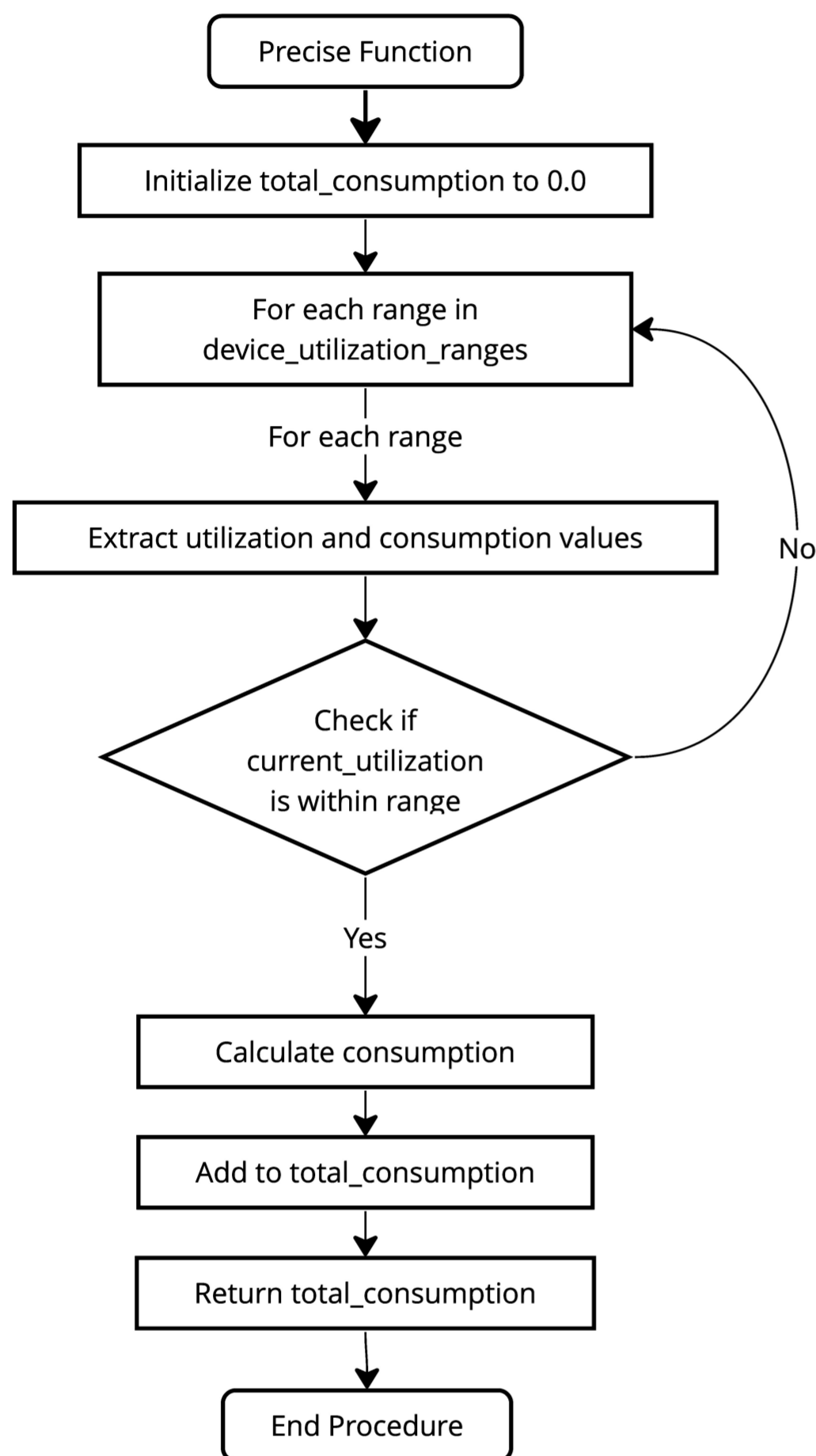
Enhancing Sustainability in Edge Computing Environment

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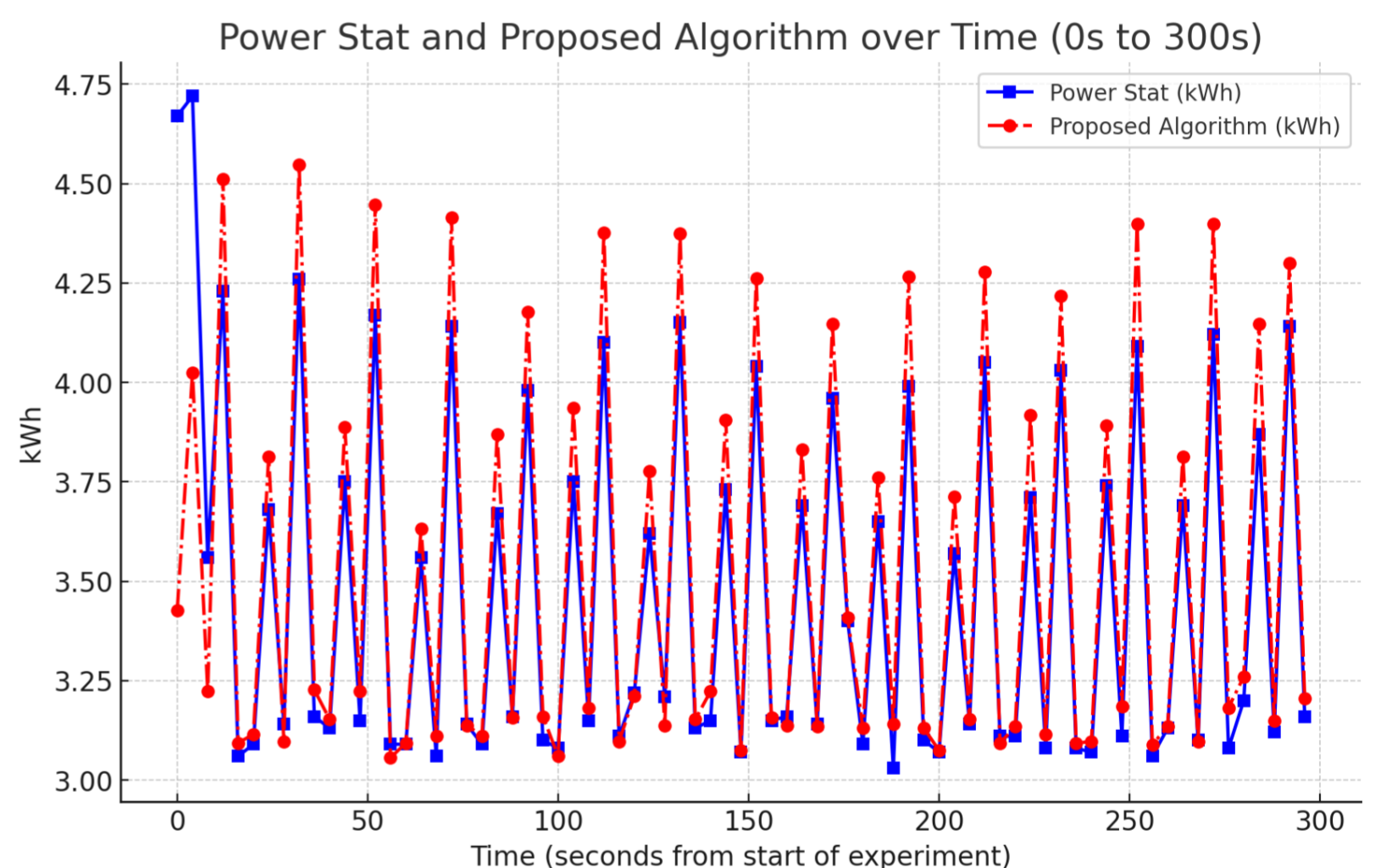
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PRECISE



Rationale & Results

- ▶ The Edge-Native Carbon-Aware Orchestration (ECO) Framework introduces the Predictive Resource-Efficient Computing for Intelligent Sustainable Edge (PRECISE) estimator.
- ▶ A Hardware Agnostic Energy Estimator has been proposed using a Heuristic Energy model based on computing resource utilisation over time.
- ▶ The tool aligns with edge-cloud advancements with environmental sustainability by measuring energy efficiency in real-time.



Next Steps

- ▶ The result highlights the PRECISE estimator's capability in tracking the carbon footprint of edge computing resources.
- ▶ It indicates the estimator's importance for cloud computing environments, advancing energy-aware orchestration strategies.
- ▶ The PRECISE estimator offers precise energy consumption estimates, helping optimize energy usage in cloud platforms.
- ▶ This contributes to the evolution of more sustainable computing practices.



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