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Connect to Crowd

Chandana B S¹, Nisha A², Harikrishnan S R³

Student, MCA, CHMM College for Advanced Studies, Trivandrum, India¹ Assistant Professor, MCA, CHMM College for Advanced Studies, Trivandrum, India² Associate Professor, MCA, CHMM College for Advanced Studies, Trivandrum, India³

Abstract: Crowdsourcing (CS) involves gathering needed services, ideas, or content by soliciting contributions from a broad audience, particularly from online communities. In our proposed system, we aim to implement a budget-constrained online crowdsourcing framework by introducing a two-tiered social crowdsourcing architecture. To improve these models, we create incentive mechanisms that enhance computational efficiency, individual rationality, budget feasibility, cost accuracy, and time accuracy. Crowdsourcing platforms are vital for promoting transparency and collaboration among participants, all while reducing resource use and costs. To support this, these platforms include mechanisms for monitoring and evaluating worker performance. Our project introduces a secure multi-tiered worker quality evaluation framework utilizing blockchain technology. Our Proof of Concept (PoC) analysis demonstrates that blockchain effectively addresses security concerns such as trust, privacy, and accountability in current worker performance evaluation systems.

Keywords: Crowdsourcing, Incentive Mechanisms, Blockchain Technology, Worker Quality Evaluation, Budget-Constrained Framework

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