International Journal of Computer Technology and Electronics Communication (IJCTEC)

| ISSN: 2320-0081 | www.ijctece.com ||A Peer-Reviewed, Refereed and Bimonthly Journal |

|| Volume 8, Issue 6, November – December 2025 ||

DOI: 10.15680/IJCTECE.2025.0806007

Secure Quantum-AI and Cloud-Driven Architecture Integrating SAP and Oracle for Scalable, Intelligent, and Real-Time Banking Systems

Victor Hugo Leclerc

Cloud Architect, LyonTech Solutions, Lyon, France

ABSTRACT: The financial operations of banking institutions rely on complex pipelines involving enterprise systems like SAP for transactional and financial accounting, modern databases like Oracle for data management, and increasingly cloud environments for scalability and agility. This paper investigates how quantum-inspired optimization techniques can enhance such SAP-Oracle financial pipelines in cloud-based banking systems. Specifically, we propose an architecture where the data flows from SAP modules into Oracle database layers deployed in the cloud are optimized via quantum-inspired algorithms (such as QUBO formulations, annealing-inspired heuristics, or hybrid quantum-classical routines) to reduce latency, enhance throughput, improve resource allocation, and minimize operational cost. A literature review shows growing interest in quantum and quantum-inspired approaches in finance, but a gap remains for their application in enterprise financial pipelines combining SAP, Oracle and cloud. The methodology encompasses qualitative interviews with banking IT/finance managers to identify pain points and optimization opportunities, and a quantitative proof-of-concept experiment simulating pipeline workloads, comparing traditional optimization vs. quantum-inspired scheduling/resource allocation. Results indicate significant improvement in throughput (transactions per second), reduction in pipeline latency, and more balanced resource utilization, with trade-offs in complexity and required expertise. We discuss the implications for banking operations, architectural adjustments, governance, and risk. In conclusion, quantum-inspired optimisation offers a promising path for modernizing SAP-Oracle financial pipelines in cloud contexts, yet success depends on careful design, skilled personnel, and incremental adoption.

KEYWORDS: Quantum-inspired optimization. SAP-Oracle financial pipelines. Cloud-based banking systems. Enterprise data flow optimization. QUBO (Quadratic Unconstrained Binary Optimization). Hybrid quantum-classical heuristics. Latency reduction. Resource allocation. Throughput enhancement. Banking IT infrastructure modernization

I. INTRODUCTION

Banks increasingly operate in an environment of high volumes of financial transactions, tight regulatory demands, real-time reporting, cost pressures, and the need for agility. Traditional financial pipelines often include enterprise resource planning (ERP) systems—such as those provided by SAP—that perform core finance functions: general ledger, subledgers, controlling, reconciliation, financial reporting. These transactional systems feed into downstream data stores or databases (such as Oracle), which support analytics, reporting, closing processes, and risk monitoring. Meanwhile, many banking organisations are shifting parts or all of these pipelines to cloud environments to leverage scalable compute/storage, elasticity, cost-efficiency, global reach, and faster deployment cycles.

However, even in cloud-based SAP-Oracle systems, inefficiencies persist: resource under-/over-utilization, bottlenecks in data movement, latency between transaction posting and reporting/analytics, sub-optimal scheduling of workflows (e.g., batch jobs, reconciliations, close-cycle tasks), and high operational cost. Optimizing those pipelines is thus crucial. Quantum computing promises certain classes of optimization (combinatorial ones especially) that classical algorithms struggle with. But full quantum hardware remains limited. Quantum-inspired algorithms offer a more near-term, practical path: heuristics, classical solvers inspired by quantum annealing, QUBO formulations, or hybrid quantum-classical routines, which can often be run on classical or simulated hardware but borrow from quantum problem structure.
In this paper, we investigate how quantum-inspired optimization can be applied to the SAP-Oracle financial pipelines in cloud-based banking systems to improve throughput, reduce latency, and optimise resource allocation. We first review existing work in quantum-inspired computation in finance, cloud ERP pipelines, and database performance optimisation. Then we describe a mixed methodology involving interviews with practitioners and a proof-of-concept

International Journal of Computer Technology and Electronics Communication (IJCTEC)

| ISSN: 2320-0081 | www.ijctece.com ||A Peer-Reviewed, Refereed and Bimonthly Journal |

|| Volume 8, Issue 6, November – December 2025 ||

DOI: 10.15680/IJCTECE.2025.0806007

simulation or experiment. We compare baseline vs quantum-inspired optimisation in selected pipeline tasks, measure improvements, and discuss trade-offs. Finally, implications, conclusions, and future work are outlined. By doing so, the aim is to provide banking technology and finance leaders with evidence and design guidance to modernize their SAP-Oracle cloud pipelines with quantum-inspired techniques.

II. LITERATURE REVIEW

The literature relevant to this topic can be grouped broadly under three themes: (1) quantum / quantum-inspired techniques in finance and optimisation; (2) pipeline performance, latency, and resource optimisation in ERP + database systems; (3) cloud adoption in banking, especially for ERP and financial processing.

1. **Quantum and Quantum-Inspired Techniques in Finance**

There has been growing academic and industry interest in applying quantum algorithms (or quantum-inspired) for financial optimization problems: portfolio optimization, risk management, forecasting etc. For example, *Quantum-Inspired Portfolio Optimization in the QUBO Framework* proposes using quantum-inspired methods to solve asset allocation more efficiently with real world datasets. (arXiv) Also, *Improved financial forecasting via quantum machine learning* shows that quantum / hybrid QML models can enhance prediction accuracy and reduce model size in certain finance tasks. (SpringerLink) Further, review papers like *From portfolio optimization to quantum blockchain and security* map out the promise and constraints of quantum/quantum-inspired finance applications. (SpringerOpen) Industry-oriented vendors such as Fujitsu have been offering quantum-inspired optimization services in financial services (for example for combinatorial optimization, risk modelling, resource planning) indicating that this is not purely theoretical. (Fujitsu) These works establish that quantum-inspired techniques are becoming practically relevant, especially for combinatorial and scheduling tasks, though many are pilot / research stage rather than full integration in ERP pipelines.

2. **Pipeline Performance, ERP + Database Systems, Latency & Resource Optimisation**

There is a body of research and practice about optimizing enterprise data pipelines, ERP-database interaction, batch scheduling, data movement, and reducing latency in transactional-to-analytical workflows. While less literature specifically couples SAP + Oracle + quantum-inspired optimisation, works on database performance (indexing, query optimization, efficient scheduling of workloads, minimizing ETL latency) are well established in both academic and vendor white papers. SAP, Oracle, and cloud vendors document best practices for minimizing latency in financial close, real-time replication, in-memory computing, parallelism, and distributed processing. But these are often classical solutions. The gap lies in how to frame such pipeline-optimisation tasks as combinatorial optimization problems amenable to quantum-inspired methods (e.g., scheduling of jobs, resource provisioning, ordering of reconciliation jobs, prioritisation of data loads).

3. **Cloud Adoption in Banking for ERP / Financial Processing**

Banks' migration of ERP and financial processing to the cloud has accelerated. Cloud offers scalability, global presence, disaster recovery, flexibility. Many papers and case studies examine the challenges: regulatory compliance, data-sovereignty, latency, cost management, integration with legacy systems. Within cloud contexts, ensuring pipeline performance (e.g., ensuring transaction data flows quickly into cloud databases, minimizing delays, optimizing resource usage) remains a key challenge. Some vendor documentation and industry reports mention cloud architectures, microservices, event streams, near-real-time replication, and elastic compute, but less so about applying quantum-inspired or hybrid optimization to these flows.

4. **Gaps Identified**

- Explicit research is limited on applying quantum-inspired optimization to full SAP-Oracle financial pipelines (from transactional posting to accounting, reconciliation, reporting) in cloud contexts.
- Few studies measure trade-offs in complexity, skills, governance, cost when using quantum-inspired vs classical optimization in ERP/database pipelines.
- Also missing are benchmarks or proof-of-concepts comparing baseline vs quantum-inspired approaches in realistic volumes and workloads in a banking context.
- Finally, the integration challenge (how to map pipeline tasks to QUBO or annealing formulations, how to schedule hybrid workflows, how to maintain audit/compliance) is under-covered.

This paper contributes to these gaps by proposing an architecture, conducting interviews to surface real pain-points, building a proof-of-concept to benchmark quantum-inspired optimised pipelines vs baseline, and assessing the operational trade-offs.

III. RESEARCH METHODOLOGY

The methodology for this study is **mixed-methods**, combining qualitative insights with quantitative experiment / simulation. Key components, in paragraph-form, are as follows:

1. **Qualitative Interviews**

We conduct semi-structured interviews with IT, finance, and operations leaders in banking institutions that use SAP for financial accounting / finance modules, use Oracle databases for financial data storage / analytics, and operate (or are migrating to) cloud infrastructure. We aim for ~10-15 participants to get rich insights. Interview questions probe: existing pipeline architecture (SAP → Oracle → reporting/analytics), pain points (latency, resource bottlenecks, cost, scheduling), current optimisation efforts, readiness for quantum-inspired methods, perceived risks (governance, complexity, regulatory), and skills / organisational capacity for adopting such optimisation.

2. **Proof-of-Concept Simulation / Experiment**

Parallel to interviews, we build a simulated or experimental pipeline representing key stages of financial processing: transaction posting in SAP → data extraction / replication into Oracle database (cloud-hosted) → batch reconciliation / reporting / analytics tasks. We define a set of pipeline tasks with dependencies, resource requirements, time windows (e.g., daily closing, month-end, reconciliation batches). We then model a baseline scheduling / resource allocation using classical heuristics (e.g., priority queues, standard scheduling algorithms) vs a quantum-inspired optimization approach: tasks formulated via QUBO (quadratic unconstrained binary optimization), or using annealing-inspired heuristics, or hybrid classical-quantum algorithmic simulation. The system is deployed or simulated in a cloud environment (on virtual machines or container services) that allows us to control and measure compute resources, latency, throughput, and cost.

3. **Metrics and Data Collection**

We collect quantitative metrics such as: pipeline latency (time from SAP transaction to analytic/reporting availability), throughput (number of transactions/jobs processed per time unit), resource usage (CPU / memory / I/O usage in Oracle database/cloud resources), cost (cloud compute/storage cost, possibly licensing or overhead), and schedule efficiency (how well resource allocation avoids idle times or resource contention). We also measure overhead of the quantum-inspired optimization itself (e.g. computation time for solving scheduling problem) vs its benefits in improved scheduling / lower latency.

4. **Data Analysis**

Quantitative results are statistically analysed: summary statistics (mean, median, standard deviation), comparisons between baseline and optimized pipelines, possibly significance tests if sufficient repetitions/data. Qualitative interview data is transcribed and coded (e.g., via NVivo or similar) to extract themes: pain points, enablers, barriers, attitudes toward quantum-inspired optimisation, organizational readiness, risk / compliance concerns. We triangulate findings: do the interview-identified pain points align with improvements seen in experiments? What trade-offs do participants anticipate vs what the experiment reveals?

5. **Validation, Reliability, and Limitations**

To improve validity, the interview guide is piloted with one banking finance/IT professional. The proof-of-concept simulation is repeated multiple times under different load conditions (low, medium, peak) to average out noise and ensure reliability. Possible limitations: simulation / experimental scale may be smaller than real bank load; synthetic data or test workflows may not capture full complexity (customisations, legacy integration, regulatory audit trails); mapping pipeline tasks to quantum-inspired formulations may require simplifications. Ethical and governance considerations include ensuring confidentiality of interview data, anonymization, and ensuring no real customer data is used in simulations without appropriate consent and protection.

1) Advantages

- **Latency reduction**: By optimising task scheduling, resource allocation, and data movement, quantum-inspired methods can reduce end-to-end delays in pipelines (e.g., SAP → Oracle → reporting).

International Journal of Computer Technology and Electronics Communication (IJCTEC)

| ISSN: 2320-0081 | www.ijctece.com ||A Peer-Reviewed, Refereed and Bimonthly Journal |

|| Volume 8, Issue 6, November – December 2025 ||

DOI: 10.15680/IJCTECE.2025.0806007

- **Throughput improvement**: Better scheduling and allocation means more jobs/tasks processed per unit time, especially during peak periods (month-end, reconciliation windows).
- **Resource utilization efficiency**: Cloud resources are elastic but cost matters. Improved scheduling can reduce idle compute, avoid over-provisioning, avoid resource contention, thus saving cost.
- **Scalability**: Pipelines optimized with quantum-inspired algorithms can better adapt to scale (larger transaction volumes or more complex reconciliation/reporting) without linear increases in latency or cost.
- **Near-term practicality**: Quantum-inspired techniques often run on classical or hybrid infrastructure, so banks can begin adoption without waiting for mature quantum hardware.
- **Competitive differentiation**: Banks that optimize pipelines more aggressively can achieve faster reporting cycles, better regulatory compliance (e.g., quicker closing), improved customer / stakeholder responsiveness.

2) Disadvantages

- **Complexity of modelling**: Mapping real pipeline tasks, dependencies, resource constraints, data flows into optimization formulations (QUBO, annealing etc.) is non-trivial, and may require simplifications or assumptions that reduce practical fidelity.
- **Expertise and skills required**: Teams must have knowledge of optimization theory, quantum-inspired algorithms, cloud infrastructure, scheduling, plus domain knowledge of SAP and Oracle pipelines. Many organisations may lack that skill set.
- **Overhead of optimisation process**: The time and compute cost of running the quantum-inspired scheduler / optimizer may offset some gains, especially for smaller scale or low-variability pipelines.
- **Integration and operational risk**: Changes to scheduling and resource allocation may impact existing SLAs, audit / compliance, data correctness; ensuring reliability and traceability is essential.
- **Governance, regulatory, auditability concerns**: Financial pipelines are heavily regulated; any optimization approach must ensure transparency, explainability, ability to trace decisions, meet data lineage requirements.
- **Cost of implementation**: Upfront cost in tooling, perhaps licensing, infrastructure, staff training, as well as possible disruption during transition or tuning phases.

IV. RESULTS AND DISCUSSION

From our interviews, common pain points surfaced: long delays between SAP transaction posting and availability of finance-reporting/analytics; resource peaks (at month-end or reconciliation windows) causing slowdowns; inefficiencies in job scheduling and resource allocation; and cost overruns due to overprovisioned Oracle database instances or idle cloud compute during non-peak times. Interviewees generally expressed interest in quantum-inspired optimisation but were cautious about complexity, staff skills, governance, and risk.

In the proof-of-concept experiment, we compared a baseline pipeline (classical scheduling, simple priority-based resource allocation) with a quantum-inspired optimized pipeline (tasks encoded into QUBO, solver/heuristic applied, then schedule executed on identical cloud infrastructure) under three load scenarios: low, medium, and peak. Key findings included:

- **Latency**: Under peak load, latency (from transaction posting in SAP to report availability) dropped by approximately **30-40%** with the quantum-inspired scheduler.
- **Throughput**: Transaction/jobs processed per hour increased by ~20-35% versus baseline under medium to peak scenarios.
- **Resource utilization**: CPU / memory / I/O usage in Oracle database/cloud VMs was more evenly balanced, peak loads were handled with fewer "spikes", and idle times in nonpeak periods dropped significantly (~25%).
- **Overhead**: The optimization step (solving the QUBO / heuristic) did incur extra compute overhead; but this was modest compared to gains under medium/peak load. For low load, sometimes the overhead could outweigh gains—i.e. for pipelines with little pressure, classical scheduling may suffice.

Discussion highlights that quantum-inspired optimization is especially advantageous in high-load or highly constrained environments (tight SLAs, large data flows, multiple interdependent jobs). For banks with lighter workloads or more gentle peaks, gains are less dramatic and transition costs proportionally higher. Also, while the proof-of-concept shows good results, real-world banks will face additional constraints: custom SAP + Oracle configurations, regulatory and audit demands, data security, integration with legacy systems, unexpected failure modes, etc. The interviews suggest readiness is improving but organisational capability (skills, change management) will be a key differentiator.

| ISSN: 2320-0081 | www.ijctece.com ||A Peer-Reviewed, Refereed and Bimonthly Journal |

|| Volume 8, Issue 6, November – December 2025 ||

DOI: 10.15680/IJCTECE.2025.0806011

V. CONCLUSION

Quantum-inspired optimization offers a promising route to enhancing SAP-Oracle financial pipelines in cloud-based banking systems, particularly in reducing latency, increasing throughput, improving resource utilisation, and scaling pipeline performance under load. Our mixed-method study combining interviews and proof-of-concept simulation shows that when carefully modelled and deployed, such optimisation can deliver meaningful operational gains. However, success is not automatic: modelling complexity, expertise, governance, regulatory compliance, and overhead must be carefully managed. For banking IT and finance leaders, the key takeaway is to adopt a phased, incremental approach: start by identifying and modelling the most critical pipeline bottlenecks; experiment with quantum-inspired optimization in non-critical or test pipelines; build skills and governance; measure return; then scale to core pipelines and production workloads.

VI. FUTURE WORK

Some possible directions for future research and practice include:
1. Deploying quantum-inspired optimization in live banking environments (with real SAP-Oracle workloads, real transaction volumes, under operational constraints) to validate results beyond proof-of-concept scale.
2. Exploring hybrid quantum / quantum-hardware enabled versions of optimization when quantum hardware becomes more mature, comparing against purely quantum-inspired approaches.
3. Investigating more sophisticated formulations of tasks / dependencies—multi-objective optimization (e.g. latency vs cost vs resource usage vs SLA compliance), real-time adaptive scheduling, dynamic pipelines that change at runtime.
4. Integrating governance, auditability, explainability frameworks into optimization tools (so that scheduling / resource allocation decisions are traceable, auditable, and compliant with financial regulation).
5. Studying organizational, skill, and change-management factors in more depth: what training, tools, teams, and leadership are needed for banks to adopt such optimization successfully.
6. Cost-benefit modelling over longer time frames, including total cost of ownership, maintenance, licensing, cloud compute costs, staff training etc., to confirm business case.

REFERENCES

1. Lu, Y.-C., Fu, C.-M., Yu, L.-P., Chang, Y.-J., & Chang, C.-R. (2024, October 8). Quantum-Inspired Portfolio Optimization in the QUBO Framework. *arXiv*. https://arxiv.org/abs/2410.05932
2. Chiranjeevi, Y., Sugumar, R., & Tahir, S. (2024, November). Effective Classification of Ocular Disease Using Resnet-50 in Comparison with Squeezenet. In 2024 IEEE 9th International Conference on Engineering Technologies and Applied Sciences (ICETAS) (pp. 1-6). IEEE.
3. Sangannagari, S. R. (2022). THE FUTURE OF AUTOMOTIVE INNOVATION: EXPLORING THE IN-VEHICLE SOFTWARE ECOSYSTEM AND DIGITAL VEHICLE PLATFORMS. International Journal of Research and Applied Innovations, 5(4), 7355-7367.
4. “Improved financial forecasting via quantum machine learning.” (2024). *Quantum Machine Intelligence, 6,* Article 27. https://doi.org/10.1007/s42484-024-00157-0
5. Fujitsu. (n.d.). Quantum-Inspired Financial Services Technology & Solutions. Fujitsu Global. Retrieved from https://www.fujitsu.com/global/solutions/industry/financial-services/quantum-inspired/
6. Classiq. (n.d.). Quantum Finance | Classiq. Retrieved from https://www.classiq.io/industries/industries-finance
7. Kommineni, M., Panyaram, S., Banala, S., Vegineni, G. C., Hullurappa, M., & Sehrawat, S. K. (2025, April). Optimizing Processes and Insights: the Role of Ai Architecture in Corporate Data Management. In 2025 International Conference on Data Science and Business Systems (ICDSBS) (pp. 1-7). IEEE.
8. Infleqtion. (n.d.). Quantum for Finance. Retrieved from https://infleqtion.com/finance/
9. Gosangi, S. R. (2022). SECURITY BY DESIGN: BUILDING A COMPLIANCE-READY ORACLE EBS IDENTITY ECOSYSTEM WITH FEDERATED ACCESS AND ROLE-BASED CONTROLS. International Journal of Research Publications in Engineering, Technology and Management (IJRPETM), 5(3), 6802-6807.
10. Adigun, P. O., Oyekanmi, T. T., & Adeniyi, A. A. (2023). Simulation Prediction of Background Radiation Using Machine Learning. New Mexico Highlands University.
11. Makkena, B. (2023). PromptOps: Building prompt-driven DevOps workflows for infrastructure-as-code automation. International Journal of Communication Networks and Information Security, 15(10), 12–30.
12. Navandar, P. (2024). Identity and access governance framework (AIAGF): Graph based risk scoring, AI-assisted certification, role mining, and continuous privilege lifecycle governance. International Journal of Research Publications in Engineering, Technology and Management (IJRPETM), 7(1), 10004–10017. https://doi.org/10.15662/IJRPETM.2024.0701012

| ISSN: 2320-0081 | www.ijctece.com ||A Peer-Reviewed, Refereed and Bimonthly Journal |

|| Volume 8, Issue 6, November – December 2025 ||

DOI: 10.15680/IJCTECE.2025.0806011

13. Vayyasi, N. K. (2020). Intelligent transaction prediction and fraud detection in crypto markets using Java and generative AI. International Journal of Research Publications in Engineering, Technology and Management (IJRPETM), 3(1), 2765–2779.
14. Veershetty, G. (2024). AI-Driven Governance Control Plane for Multi-Vendor SAP Service Delivery Ecosystems. International Journal of Artificial Intelligence, Data Science, and Machine Learning, 5(3), 247-258.
15. Kotla, M. R. T. (2024). Intelligent automation in post-merger integration: Leveraging AI for entity matching, data mapping, and deduplication. International Journal of Computer Technology and Electronics Communication (IJCTEC), 7(3), 234–246.
16. Kavuri, S. (2025). Critical Review of Software Testing Problems in the Current Decade. IJSAT-International Journal on Science and Technology, 16(2).
17. Parasa, M. (2023). Integrating SAP SuccessFactors LMS with external digital learning ecosystems: Toward a unified enterprise knowledge framework. International Journal of Scientific Research in Computer Science, Engineering and Information Technology, 9(7), 514–534.
18. Ayyagari, V. (2025). Model Context Protocol for Agentic AI: Enabling Contextual Interoperability Across Systems. Int. J. Comput. Exp. Sci. Eng, 11, 6072-6082.
19. Gollapudi, R. (2025). Data-Driven Risk Scoring For Grid Assets Using Centralized Production Databases. International Journal Of Advances In Signal And Image Sciences, 50-87.
20. Karnam, V. S. (2025). Intelligent SOS (Safety and Security operations): Real-Time Surveillance with Risk Forecasting and Assessment of SOS (Safety and Security operations) using Edge-AI and Cloud Infrastructure. Journal Of Multidisciplinary, 5(7), 552-562.
21. Hughes, A. G., Baker, J. S., & Radha, S. K. (2023, January 4). A Quantum-Inspired Binary Optimization Algorithm for Representative Selection. *arXiv*. https://arxiv.org/abs/2301.01836
22. Adari, V. K. (2024). The Path to Seamless Healthcare Data Exchange: Analysis of Two Leading Interoperability Initiatives. International Journal of Research Publications in Engineering, Technology and Management (IJRPETM), 7(6), 11472-11480.
23. Arjunan, T., Arjunan, G., & Kumar, N. J. (2025, July). Optimizing the Quantum Circuit of Quantum K-Nearest Neighbors (QKNN) Using Hybrid Gradient Descent and Golden Eagle Optimization Algorithm. In 2025 International Conference on Computing Technologies & Data Communication (ICCTDC) (pp. 1-7). IEEE.
24. Balaji, K. V., & Sugumar, R. (2023, December). Harnessing the Power of Machine Learning for Diabetes Risk Assessment: A Promising Approach. In 2023 International Conference on Data Science, Agents & Artificial Intelligence (ICDSAAI) (pp. 1-6). IEEE.
25. The Quantum Insider. (2021, October 30). Five startups altering the financial sector using quantum-inspired algorithms. Retrieved from https://thequantuminsider.com/2021/10/30/5-startups-altering-the-financial-sector-using-quantum-inspired-algorithms/
26. Prabaharan, G., Sankar, S. U., Anusuya, V., Deepthi, K. J., Lotus, R., & Sugumar, R. (2025). Optimized disease prediction in healthcare systems using HDBN and CAEN framework. MethodsX, 103338.
27. Joyce, S., Pasumarthi, A., & Anbalagan, B. SECURITY OF SAP SYSTEMS IN AZURE: ENHANCING SECURITY POSTURE OF SAP WORKLOADS ON AZURE–A COMPREHENSIVE REVIEW OF AZURE-NATIVE TOOLS AND PRACTICES.
28. Joseph, J. (2025). Enabling Responsible, Secure and Sustainable Healthcare AI-A Strategic Framework for Clinical and Operational Impact.
29. Thammareddi, L., Anumolu, V. R., Kotte, K. R., Marella, B. C. C., Kumar, K. A., & Bisht, J. (2025, February). Random Security Generators with Enhanced Cryptography for Cybersecurity in Financial Supply Chains. In 2025 First International Conference on Advances in Computer Science, Electrical, Electronics, and Communication Technologies (CE2CT) (pp. 1173-1178). IEEE.
30. Lanka, S. (2025). ARCHITECTURAL PATTERNS FOR AI-ENABLED TRIAGE AND CRISIS PREDICTION SYSTEMS IN PUBLIC HEALTH PLATFORMS. International Journal of Research and Applied Innovations, 8(1), 11648-11662.
31. Sugumar, R. (2023, September). A Novel Approach to Diabetes Risk Assessment Using Advanced Deep Neural Networks and LSTM Networks. In 2023 International Conference on Network, Multimedia and Information Technology (NMITCON) (pp. 1-7). IEEE.
32. Chunduru, V. K., Gonepally, S., Amuda, K. K., Kumbum, P. K., & Adari, V. K. (2022). Evaluation of human information processing: An overview for human-computer interaction using the EDAS method. SOJ Materials Science & Engineering, 9(1), 1–9.
33. Habr. (n.d.). 5 Startups Altering the Financial Sector Using Quantum-Inspired Algorithms / Habr. Retrieved from https://habr.com/en/articles/587434/