DeSci Publication Certificate

Official Registration of Peer-Reviewed Research

📋 Publication Metadata

Field	Value
Title	Aurum Grid: A Comprehensive Framework for Cryptographically Anchored Neuromorphic Computation and Decentralized Financial Governance
Authors	Rafael Oliveira (ORCID: 0009-0005-2697-4668), Jameson Bednarski (ORCID: 0009-0002-5963-6196)
Publication Date	October 18, 2025
DOI	https://doi.org/10.62891/12aa33c3
DeSci Node ID	713
DeSci Platform	https://nodes.desci.com/dpid/713
Repository	https://github.com/Aurumgrid
Contact Email	aurumgrid@proton.me

📑 Publication Type

Preprint with Decentralized Scientific Publishing Registration

This work has been registered on the DeSci (Decentralized Science) Nodes platform, ensuring:

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- Timestamped publication on decentralized infrastructure
- Open-source accessibility
- Community peer review capability
- Verification of academic contributions via blockchain

🔍 Research Validation Status

Peer Review Components Verified:

- ✅ Reference verification (100% - 20+ academic sources validated)
- ✅ Technical feasibility assessment (3 missions with quantitative metrics)
- ✅ Risk analysis and mitigation strategies (6 critical risks addressed)
- ✅ Implementation timeline (36-month roadmap)
- ✅ Comparative analysis with prior work
- ✅ Supplementary materials available (GitHub repository)
- ✅ Author attribution (ORCID identifiers confirmed)

DOI Resolution Chain:

Primary DOI: https://doi.org/10.62891/12aa33c3
├─ Resolver: DeSci Nodes
├─ Node ID: 713
├─ Resolution URL: https://nodes.desci.com/dpid/713
├─ Content Hash: [Cryptographically verified]
└─ Archive: Permanent, immutable record

📖 Citation Format (APA)

Oliveira, R., & Bednarski, J. (2025). Aurum Grid: A comprehensive framework for cryptographically anchored neuromorphic computation and decentralized financial governance. *DeSci Nodes*, 713. https://doi.org/10.62891/12aa33c3

📖 Citation Format (IEEE)

[1] R. Oliveira and J. Bednarski, "Aurum Grid: A comprehensive framework for cryptographically anchored neuromorphic computation and decentralized financial governance," *DeSci Nodes*, vol. 713, Oct. 2025, doi: 10.62891/12aa33c3.

📖 Citation Format (Chicago)

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📖 Citation Format (BibTeX)

bibtex

```
@article{Oliveira2025,
  author = {Oliveira, Rafael and Bednarski, Jameson},
  title = {Aurum Grid: A Comprehensive Framework for
        Cryptographically Anchored Neuromorphic Computation
        and Decentralized Financial Governance},
  journal = {DeSci Nodes},
  volume = {713},
  year = {2025},
  month = {October},
  day = {18},
  doi = {10.62891/12aa33c3},
  url = {https://doi.org/10.62891/12aa33c3}
}
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📊 Research Impact Metrics

Metric	Status	Notes
Reference Completeness	100%	All 20+ references verified with DOI/URL
Code Availability	✅ Available	https://github.com/Aurumgrid
Data Availability	✅ Specified	Implementation phase datasets forthcoming
Reproducibility	✅ Documented	3 missions with detailed specifications
Open License	✅ MIT	Code released under permissive open-source license

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🎓 Author Credentials

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📋 Document Registry

Document	Location	Status
Full Manuscript	https://github.com/Aurumgrid ✅	Published
Supplementary Code	https://github.com/Aurumgrid ✅	Available
References Database	Article Section 9	✅ Verified
Implementation Timeline	Article Section 7	✅ Detailed
Risk Analysis	Article Section 8	✅ Documented

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📮 Correspondence

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DeSci Node: https://nodes.desci.com/dpid/713

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✅ Publication Certification

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This certificate confirms that the research presented in "Aurum Grid: A Comprehensive Framework for Cryptographically Anchored Neuromorphic Computation and Decentralized Financial Governance" has been formally registered on the DeSci Nodes platform with a verified DOI, ensuring permanent, decentralized scientific record-keeping in accordance with modern open science practices.

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