

Patrick Mockridge

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PROFILE AND METHOD

Protocol engineer. Process safety engineer, 2006–2015; chartered 2013; independent protocol and verification work since 2016.

The method: specify the failure mode before the architecture; prove what can be proved; contain what cannot; record provenance with every result. DarkWow is containment; Rholo is continuity; Azoth is provenance; Mudra is verification in a familiar form.

SELECTED WORK

DarkWow

Designed for private organisations on a public chain, without an administrator or a public voter roll

2026–; redesign April–October 2026 · Research prototype (mainnet TBD); genesis-set contracts; one developer with AI; mechanized circuit gate; HAZOP tabletop

Rholo

A Rust node for the λ -calculus: native object capabilities and machine-checked laws

2026; port August–October 2026 (about two months) · Pre-release; 85 laws (109 entries), 100 proved including 23 node-tied; 14 crates, 0 unsafe; community testnet live

Azoth

A process calculation library where every number carries its provenance

2026 · v0.1.x; 97 upstream issues filed (80 closed); no-op Gibbs minimizer and wrong-unit vapour-pressure curve; not for design work

Mudra

Prove a committed calculation trace is unchanged without revealing the spreadsheet

2026 · Research build; ~6 KB proof; insurance brokering and fiscal metering case studies

Records: patrickmockridge.github.io/darkwow/ · [/rholo/](#) · [/azoth/](#) · [/mudra/](#)

Engagements: protocol review, rescue, and verification; a bounded triage with written findings, then a scoped remediation. Remote from Aberystwyth, Wales.

CHRONOLOGY

PERIOD WORK

2026	Delivery: Rholo port (August–October), DarkWow redesign (April–October), Azoth, Mudra.
2022–2026	Independent research and writing: network analysis, evidence archiving, influence/secrecy simulation; RChain legacy work: Gorki/BigSur old-node fork, RGov/Rhobot recovery proposal with Jim Whitescarver (2024); UNISS/Ingenesist simulations (2026).
2019–2022	Created the Romeo-Juliet Framework; continued RChain work; independent research through COVID; property purchase and renovation; crypto investments.
2016–2019	Treehouse AI and Robotics software nanodegrees; early ERC-1155 context at Enjin (2016); named advisor, Enjin Coin ICO (2017); CoEngineers, early investor (2017–2019).
2006–2015	Chemical engineer, process safety; UK and North Africa. Chartered 2013. Bitcoin since 2011; London Ethereum community, 2014.
2002–2006	MEng Chemical Engineering, University of Edinburgh.

RESEARCH AND WRITING

Romeo-Juliet critical risk-analysis framework; UNISS/Ingenesist simulations; DarkFi stack analyses. [Selected writing](#) · [Ingenesist archive](#).