

## Budget and Justification — TGCR Witness Protocol (Initial \$50K)

### Summary (Requested Funding: \$50,000)

- Personnel / Contracts: \$20,000
- Cloud Compute & Test Campaign: \$15,000
- Development / OSS Packaging: \$5,000
- Travel / Dissemination: \$5,000
- Misc / Contingency: \$5,000

### Line-item Breakdown

#### 1. Personnel / Contracts — \$20,000

- PI stipend (partial coverage): \$8,000 — PI time at 20% FTE across 6 months.
- Contract mathematician: \$10,000 — fractional contract (proofs, formalization deliverables).
- Project accounting and admin: \$2,000 — overhead for invoicing and small subcontractor coordination.

Justification: The contract mathematician will provide formal proofs and ensure TGCR has publishable theoretical results. PI stipend compensates for time to run experiments and manage partners.

#### 2. Cloud Compute & Test Campaign — \$15,000

- AWS/GCP credits for adversarial runs and CI: \$12,500
- Storage and dataset hosting (Zenodo/OSF deposits + egress): \$2,500

Justification: SAR test campaign requires repeated runs across multiple model checkpoints; cloud credits are the most efficient way to ensure reproducibility.

#### 3. Development & OSS Packaging — \$5,000

- Engineer contractor (bug fixes, packaging, pip distribution): \$4,000
- Minor third-party services (CI runners, code signing): \$1,000

#### 4. Travel & Dissemination — \$5,000

- Support for conference travel (NeurIPS/partner meeting): \$5,000

#### 5. Misc / Contingency — \$5,000

- Buffer for additional compute, minor subcontracting, or emergent needs.

### Alternate Budget Scenarios

- \$100K Scenario: increase compute to \$40K, hire a full-time engineer (\$40K), increase math subcontract to \$15K, raise dissemination to \$5K.
- \$250K Scenario: dedicated 1 FTE engineer, 1 FTE test engineer, expanded compute (\$120K), formal verification subcontract, and commercialization funds.

### Cost Sharing & Indirects

- This request assumes no cost-sharing. If your organization requires indirect costs, please indicate rate and we will produce a revised budget justification.