**TIG CHALLENGE DEVELOPER**

**GRANT AGREEMENT**

**THIS GRANT AGREEMENT (“Agreement”)** is dated **[Date]** 2025 (**“Effective Date”**).

**PARTIES**

**THE INNOVATION GAME a Swiss Association** constituted in Zug Switzerland with address; Gartenstrasse 6, 6300 Zug, Switzerland (“**TIG**”); and

**[Name of TIG Challenge Developer]** with address **[Address of TIG Challenge Developer]** (“**TCD**”).

**AGREED TERMS**

In consideration for the Grant, TCD has agreed to provide certain Services to TIG in respect of the Challenges (all as defined below) on the terms and conditions set out in Schedule 1.

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| **“Challenge(s)”** | The challenge(s) specified and described in Milestone 1 in **Schedule 1**. |
| **“Confidential Information”** | Any information designated in writing by a party by appropriate legend, as confidential. |
| **“Grant”** | The monies payable in accordance with **Schedule 1** by TIG to TCD in consideration for the Services. |
| **“The Innovation Game”** | A protocol managed and operated by TIG and designed to accelerate algorithmic innovation by turning difficult computational problems into competitive challenges. |
| **“Intellectual Property”** | Patents and patent rights, trademarks, service marks, registered designs, applications for any of the foregoing, unregistered design rights, copyright and any other similar protected rights in any country. |
| “**Services**” | The specific set of services to be carried out by TCD in respect of the Challenge(s), as set out and defined in **Schedule 1** of this Agreement. |
| “**TCO**” | (An acronym for “*TIG Challenge Owner*”) The person or entity responsible for delivering education for and, support and maintenance of, the Challenge(s) more fully described in The Innovation Game Terms. |
| **“Term”** | The period of twelve (12) months after the Effective Date. |
| **“The Innovation Game Terms”** | The Innovation Game Terms as at the Effective Date as may be varied by the mutual consent of the parties from time to time and which can be found at [https://github.com/tig-foundation/tig monorepo/tree/main/docs/agreements]. |

This Agreement constitutes the entire agreement between the parties for the subject matter of this Agreement.

1. **Services**
   1. In consideration for the Grant, TCD shall use reasonable efforts to provide the Services, and submit the Challenge to The Innovation Game, in accordance with the schedule set out in **Schedule 1**.
2. **Payment Terms**
   1. In consideration for the provision of the Services by TCD, TIG shall pay TCD in accordance with **Schedule 1**.
   2. It is mutually agreed and declared that no relationship of employer and employee is created under this Agreement, and that each party shall be solely responsible for its own tax obligations arising from this Agreement. TIG acknowledges that TCD is an independent contractor responsible for its own tax compliance. Neither party makes representations regarding the tax treatment of payments under this Agreement
3. **Confidential Information**
   1. Neither party shall disclose Confidential Information to the other party without the prior written consent of the other party and subject to the terms of a separate non-disclosure agreement.
4. **Intellectual Property**
   1. TCD will disclose to TIG in full, without delay and before publication, all proprietary data and all other materials as well as Intellectual Property which arise out of the provision of the Services by TCD and TCD hereby **assigns** and conveys to TIG all right title and interest in and to all such material and intellectual property rights created, developed, conceived reduced to practice or delivered by TCD either solely or jointly with others during and in connection with the development of the Challenge and performance of the Services. TCD shall irrevocably waive their moral rights in any work directly created or developed in the performance of the Services and embodied in the Challenge delivered by TCD to TIG hereunder.
   2. TCD hereby grants to TIG an irrevocable royalty free non-exclusive licence, together with the right to grant sublicenses, to use and exploit all of TCD’s pre-existing intellectual property to the extent necessary for TIG to use and exploit the intellectual property in the Challenge delivered by TCD to TIG hereunder.
   3. TCD shall cooperate with TIG and use reasonable efforts (not to exceed five (5) manhours except as mutually agreed by the parties) at the request and expense of TIG, including executing any documents, required to perfect TIG’s title in any intellectual property assigned pursuant to Clause 4.1.
5. **Warranties and Limitation of Liability**
   1. TCD shall ensure that all work carried out by them is performed with the requisite skill, care and diligence to be reasonably expected of a relevant skilled and experienced person.
   2. Any claim made by TIG under the warranty provided in Clause 5.1 of this Agreement must be made within ninety (90) days of delivery of the relevant work product.
   3. TCD’s total liability under this Agreement, including but not limited to any breach of the warrant in Clause 5.1 of this Agreement, shall not exceed, in aggregate, the amount of the Grant received by TCD under this Agreement.
6. **Challenge Acceptance and TCO Appointment**
   1. For each Challenge, the Challenge will become playable in the Innovation Game, subject to The Innovation Game Terms, upon acceptance, by TIG, of completion of Milestones 1- 5 inclusive (**Schedule 1**) for that Challenge. Notwithstanding that the Challenge becomes playable it will be subject to succession and retirement in accordance with The Innovation Game Terms.
   2. For each Challenge, TCD will be appointed TCO, subject to The Innovation Game Terms, upon acceptance, by TIG, of completion of Milestones 1- 5 inclusive (**Schedule 1**) for that Challenge.
   3. Nothing in this Agreement shall prevent TIG from working with any third party on technology solutions that are the same or similar to the Challenge(s).
7. **Term, Termination**
   1. This Agreement shall commence on the Effective Date and, subject to earlier termination in accordance with Clause 7.2, shall expire at the end of the Term.
   2. This Agreement may be terminated and the engagement of the TCD thereby terminated by TIG providing notice to TCD, without any liability for damages, apart from any payments properly accrued in accordance with the terms of this Agreement prior to termination, if the TCD:
      1. Commits any material breach of his obligations hereunder or in the reasonable opinion of TIG the conduct or performance of the TCD is unsatisfactory or contrary to the interests and objectives of The Innovation Game;
      2. Becomes bankrupt or makes any arrangement or composition with its or his creditors generally;
      3. Is found guilty of serious misconduct in connection with the performance of TCD’s obligations under this Agreement; or
      4. Is convicted of a criminal offence.
8. **General**
   1. Any notice given under this Agreement shall be deemed served if it is sent by recorded delivery address to the address above. The day of service shall be deemed to be two days after the date of posting.
   2. Notwithstanding that any provision of this Agreement may prove to be illegal or unenforceable, the remaining provisions of this Agreement shall continue in full force and effect.
   3. This Agreement supersedes all prior arrangements or promises in relation thereto only and may only be varied with the prior written agreement of each party.
   4. This Agreement does not create any partnership or agency relationship between the parties.
   5. No indulgence or forbearance by either party shall constitute a waiver under this Agreement.
   6. This Agreement shall be governed by and construed in all aspects in accordance with the Laws of England and Wales. The parties agree to submit to the exclusive jurisdiction of the English courts.
   7. Neither party shall be liable for any loss, damage or delay in performing its obligations under this Agreement if that delay is caused by circumstances beyond its reasonable control.

**THIS AGREEMENT** has been entered into as an agreement on the date stated at the beginning of it.

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| Signed for and on behalf of  **THE INNOVATION GAME** | )  ) |  |
|  |  |  |
| Signed by  **[TCD]** | )  ) |  |
|  |  |  |

**Schedule 1**

**Services**

The Services to be delivered are objective driven, with the objectives (“**Objectives**”) being to:

1. Develop the Challenge such that the instances of the Challenge generated for solving in The Innovation Game; **(i)** are as closely aligned as reasonably possible with real world instances of the Challenge, and **(ii)** incentivise the submission, to The Innovation Game, of implementations of algorithmic methods which approach or exceed state of the art algorithmic methods and implementations.
2. Provide feedback to TIG to assist TIG in defining the role of TCO with respect to the Challenge consistent with The Innovation Game Terms including the development by TIG of a scalable TCO model for the relevant Challenge with operational playbooks for third party TCO’s to follow.
3. Subject to your appointment as TCO for the Challenge in accordance with the terms of this Agreement and subject to The Innovation Game Terms, with respect to the Challenge, for a period of not less than six (6) months after your appointment to the role of TCO for the Challenge, you shall perform the role of TCO in accordance with The Innovation Game Terms.
4. Provide educational support for the Challenge in The Innovation Game and the role of TCO, positioning the objectives of The Innovation Game as a “public good”.

**Services Milestones**

**Challenge Description:**

**[Brief Description of the Challenge]**

**Milestone 1: Evidence of a Well-Defined Challenge**

1. To achieve this milestone, you will be required to:
   1. **Define:** Formally state and define the challenge along with pseudo-code. Outline its objective, constraints, and scope.
   2. **Structure:** Define the structure of the challenge along with pseudo-code. Clarify whether the target algorithms solve the full challenge or a subcomponent.
   3. **Random Instance Generation:** Describe how to generate unlimited, scalable, real-world-like benchmarks.
   4. **Verification:** Describe how to efficiently verify a solution along with pseudo-code. This may include introducing a baseline algorithm.
   5. **Asymmetry:** Demonstrate that finding a solution is substantially harder than verifying one.
   6. **Difficulty Parameters:** Define which parameters will scale the hardness of an instance, e.g., size (number of nodes) or quality (better than baseline metric).

**Milestone 2: Evidence of Real-World Alignment**

1. To achieve this milestone, you will be required to engage with an expert who will:
   1. **Review:** Evaluate the challenge proposal for alignment with existing literature, potential impact, and real-world relevance.
   2. **Design Guidance:** Provide expert input on the problem definition, benchmark creation, and evaluation metrics, ensuring strong alignment with literature.
   3. **Importance:** Clearly articulate why the selected problem variant is optimal and likely to yield practical, real-world solutions.
   4. **Expert Approval:** Confirm that the final challenge design is robust, could attract state-of-the-art algorithms, and is positioned to deliver valuable outcomes.

**Milestone 3: Completion of Specification**

1. To achieve this milestone, you will be required to deliver:
   1. **Verification Framework:** Verification framework targeting (identify and briefly describe the chosen verification criteria for the Challenge].
   2. **Specification:** Final Challenge specification document.

**Milestone 4: Delivery of Implementation**

1. To achieve this milestone, you will be required to deliver a functional, mainnet-ready implementation of your Challenge:
   1. Create a new branch from blank\_slate.
   2. Implement your challenge in the tig-challenge crate. Expected files:
      1. Rust implementation: <challenge>.rs
      2. Challenge description: <challenge>.md
      3. (optional) CUDA implementation: <challenge>.cu
   3. Implement a simple working algorithm in the tig-algorithm crate.
   4. Update tig-binary, tig-runtime, and tig-verifier to import your challenge.
   5. Coordinate with the Foundation to deploy your challenge to testnet.
   6. Where necessary, iterate on the implementation to address issues.

**Important:**

* The Innovation Games requires runtime\_signature and fuel tracking.
  + This is natively supported by tig-binary and tig-runtime if your code is written in Rust and/or CUDA.
  + Use of other languages (e.g., Python, C++) must be discussed in advance and may require additional integration work.
* We strongly recommend using Rust and/or CUDA, unless a specific framework is essential (e.g., quantum challenges using PennyLane).

**Milestone 5: Challenge Owner Infrastructure**

1. To achieve this milestone, you are required to establish essential community and promotional infrastructure for the new Challenge, including:
   1. An official X (Twitter) account
   2. A dedicated Discord channel on the TIG server
   3. A detailed TIG forum post
   4. A focused challenge website
   5. Evidence of innovator outreach
   6. A generic Challenge specification template and process guide
   7. Generic protocols and guidance for identifying appropriate relevant experts

**For the avoidance of doubt extensive marketing campaigns in support of each Challenge are not expected to be in the scope of Services.**

**Delivery**

**Milestone 1**: No later than [28] Days after the Effective Date.

**Milestone 2**: No later than [28] Days after the Effective Date.

**Milestone 3**: No later than [56] Days after the Effective Date.

**Milestone 4**: No later than [112] Days after the Effective Date.

**Milestone 5**: No later than [112] Days after the Effective Date.

**Grant**

**Initial Grant**

**USDC**

USDC equivalent US$[Grant Value] payable on the Effective Date.

**TIG Tokens**

TIG Tokens (subject to acceptance by TIG of completion of, or at the absolute discretion of TIG, progress towards achieving, relevant Milestones):

US$[Grant Value] equivalent TIG Tokens based on 30 days average (counting back from date payable) transferred to TCD on completion of Milestones 1- 2 inclusive with a three (3) month linear vest.

US$[Grant Value] equivalent TIG Tokens based on 30 days average (counting back from date payable) transferred to TCD on completion of Milestones 1 – 4 inclusive with a 3 month linear vest.