**System Context Diagram for Open Science Platform**

**Researcher**

A researcher who enrolls and interacts with the platform to upload and manage research artifacts.

**Registers and interacts with**

**Open Science Platform**

A decentralized platform that integrates blockchain, IPFS, and smart contracts to manage and share research artifacts.

**Uses for user and project data storage**

**Trusted code execution**

**Stores and retrieves research artifacts**

**Extracts metadata from uploaded files**

**Indexes and searches research artifacts**

**Core Services**
**[system]**

**Blockchain**

A decentralized ledger that ensures the integrity and traceability of user data, projects, and research artifacts.

**Smart Contract**

Enforces business rules and automates transactions on the blockchain, providing verifiable and immutable execution.

**Distributed File System**

A decentralized file storage system used to store research artifacts and metadata.

**Extended Services**
**[system]**

**Metadata Extraction**

A service that extracts and structures metadata from uploaded research artifacts.

**Search System**

A search engine used to index and search for research artifacts by keywords.

**Legend**

person
system
external person
external system