



Establishing the new gold standard for verifiable academic credentials

Provide secure, next-generation
credentialing and streamline the
entire learner experience

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Why is there a need for a next-generation digital credentialing solution?

The problem

Academic fraud (that is, the false claim of having attained a degree or other qualification from a legitimate institution, or the obtention of counterfeit degrees) is not new, but technology has made it far easier to falsify credentials, greatly exacerbating an already bad problem.

According to the New York Times, over 3,000 so-called 'diploma mills' (where people can purchase fake educational credentials for as little as \$100) are in operation at any given time. Around 50,000 fake Ph.Ds are purchased every **year**. This figure is actually greater than the average number of these credentials legitimately awarded in the same period of time.

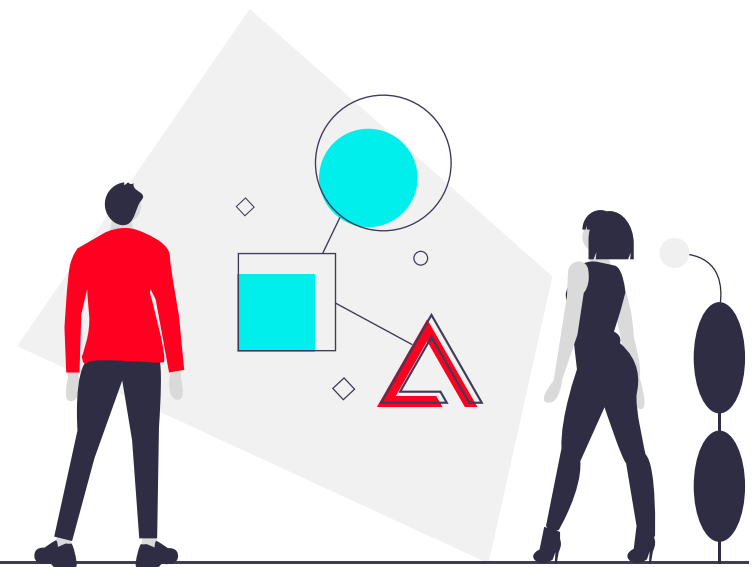
“ **A lack of verifiable identity is a key issue around credential veracity and trustworthiness.** ”

Academic fraud is detrimental for many reasons. It undermines the credibility of legitimate credentials, tarnishes the names of respected educational institutions, and creates a cycle of inefficiencies. Students need to constantly request reissued credentials, which creates a time-consuming burden for university registrars' office staff. The failure of academic institutions to provide trustworthy proof of acquired skills leads to unsatisfactory learners' experiences.

Self-Sovereign Identity (SSI) as a solution

At the root of these problems is the inherent difficulty in determining provenance. The internet enables instant sharing of material, but the origin of that information is sometimes hard to verify.

SSI addresses credential fraud issues and introduces a paradigm shift in sharing digital information. SSI solves the problem of fake credentialing by enabling the private and secure sharing of verifiable pieces of data. Built using blockchain technology, this new method establishes safe, direct communication channels between education institutions, students, and other parties alike.

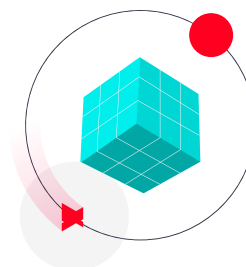


What is the real value of verifiable academic records?

Learning providers could use digital credentials as part of a wider societal ecosystem. Digital IDs could enable students to get discounts in local stores, for example, or gain access to events, help get a job, open a bank account, or sign a lease.

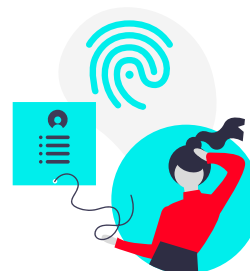
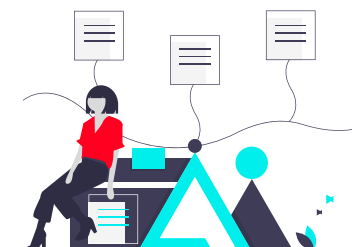
“ **Reliable credential issuance that is time- and cost-efficient** ”

The digitization of verifiable educational credentials is just the first in a series of transformative changes enabled by SSI. It benefits the entire student / professional lifecycle with a streamlined onboarding process, instant authentication of already enrolled or returning students, and direct communication between students and academic institutions.



Digital credentials are only issued once, resolving the cumbersome manual process of re-issuing and re-verifying historical credentials. Blockchain-based digital certificates are fully auditable, immutable, and trustable, which preserves certificate value and institutional reputation.

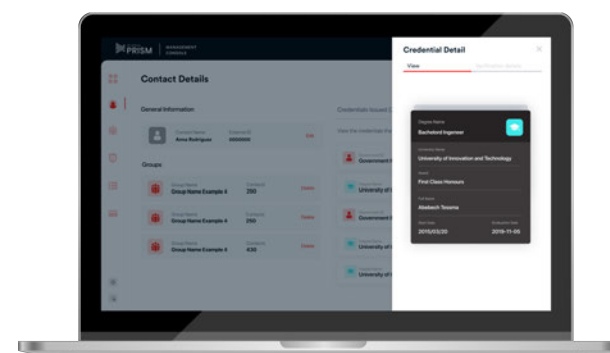
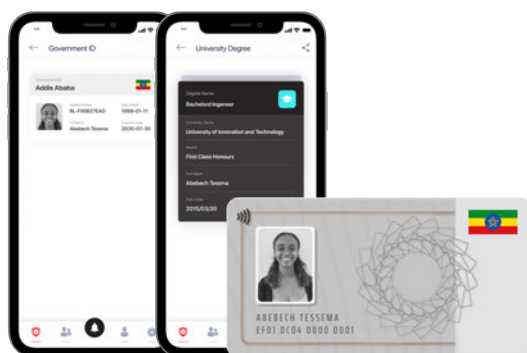
Employers can, at a glance, verify digital certificates. This eases cross-border verification issues and improves learners' career prospects abroad.



Students' digital experiences become easier, as they can store and manage their personal information and learning certificates through a secure wallet in their own mobile devices, which safeguards data from breaches and abuse. This digital availability also builds trust with future employers, who can immediately validate an applicant's academic claims.

What does Atala PRISM offer?

For all participants in the network to operate seamlessly, Atala PRISM offers separate applications for each key stakeholder.



Students and job seekers

- Use a mobile app to easily obtain and selectively share their digital identity, and educational or professional development certificates, all stored in one safe place.
- Safely connect with educational institutions or employers.
- Secure personal data with biometrics (Face ID, fingerprint) or passcode, and share only the necessary pieces of information.
- Easily manage all received verifiable credentials (search, sort, or delete them) and get notifications.
- Backup all data to an encrypted vault and restore it if they lose their phone.

Educational institutions

- Utilize a ready-made, customizable system to issue digital degrees, transcripts, or other training certifications directly to students' mobile apps.
- Create secure connections with students by generating unique QR codes for scanning via mobile app.
- Add photos and biometric data to credentials.
- Effectively manage all credentials, including: authenticity verification or revoking, customizing credential templates, bulk contact imports, sorting, filtering, and searching capabilities.
- View analytics such as mobile app usage stats and improve effectiveness of credential delivery.

How does it work?

Issuer

Universities, colleges,
schools, training
organizations



Holder

Students, learners, job
seekers, employees,
professionals



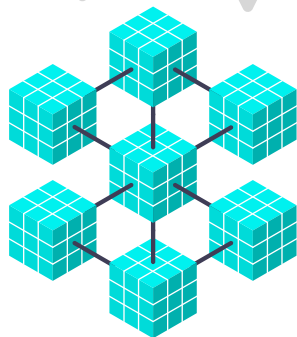
Issues credential

Signs
credential

Countersigns
credential

Shares
credential

Request permission for
specific credential attributes
(selective disclosure)



Verifies
credential



Blockchain

Requester (Verifier)

University registrars, recruiters,
and hiring managers

Why is the Atala PRISM digital identity solution the best out there?

Designed for scalability: can scale to millions of individuals, organizations, or things.

Customizable: the underlying protocol can be optimized for different use cases.

Cost-efficient with predictable payment plan: based on a batching scheme to keep cost-per-user low.

Designed for high security: built-in resilience against high-risk data breaches, and prevention of data unavailability problems often encountered with competitor solutions.





What are some of the real-world deployments of Atala PRISM?

Digital identity and credentials solution in Ethiopia

IOG is working with the Ethiopian Ministry of Education to create a next-generation blockchain-based digital identity solution that can track students' grades and educational attainment throughout their educational life. Students can receive, store, and send their achievements right from their tablets. As part of a learning management system, schools can easily view student details, issue credentials to any group of students, or monitor attendance, for example.

Identity and credentials verification pilot for the Republic of Georgia

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“ Our plan with this blockchain technology is to provide a digital ID for close to 5 million students. ”

*Minister of Education for Ethiopia, H.E Getahun Mekuria (Dr.-Ing),
April 2021.*

[Watch now](#)

Contact us

We work with your team to:

- ✓ Help you understand decentralized identity and the bold opportunity it presents.
- ✓ Develop a Proof of Concept, built by a team of leading engineers who have designed some of The most advanced DLT protocols available.
- ✓ Deploy, manage, and scale your operations.

To learn more about **Atala PRISM** and how it can transform your organization, reach out to us directly at business.development@iohk.io

Founded in 2015, Input Output is an engineering company that builds blockchain solutions for government entities, corporations, and academic institutions. Underpinned by peer-reviewed science, we are building the first blockchain-based operating system that will enable global scale financial transactions and all forms of social exchange. We aim to put billions of new people and assets on the economic map, give 3 billion unbanked people an economic identity, track global goods from source to sale, and de-risk investment in emerging markets. Our ultimate goal is to expand social and financial services worldwide by digitally verifying people and assets that are off the banking grid, consequently doubling the consumer market.

