

Final Project Close-out Report

Name of Project: Cardano Research and Education Center
Also Known As: ALBA (Ada Labs for Blockchain Applications)

Project Number: ID: #1100068

Project Manager: Jose Iadicicco

Date Project Started: March 1st 2024

Date Project Completed: December 2nd 2024

Project Overview: ALBA, Ada Labs for Blockchain Applications, has successfully achieved its goal of fostering blockchain education and innovation through a comprehensive and impactful program. By providing high-quality training, practical exposure, and a collaborative environment, the project has significantly contributed to the growth and development of Cardano's technical and educational community.

Schedule of Activities accomplished for ADA Solar and ALBA at UTN

June 3



9:00 - 13:00

- ♦ **Cardano Bare Metal Node installation and kickoff** at UTN with ADA Solar Team and Martin Ungar (Cardano Ambassador).



[Link](#)

June 10



9:00 - 13:00

- ♦ **UTN ALBA Laboratory preparation** with ADA Solar Team and UTN Team (ALBA).



[Link](#)

June 13



9:00 - 13:00

- ♦ **UTN and CF Agreement facilitated by ADA Solar:** Cardano Foundation partners with Universidad Tecnológica Nacional (UTN) of Buenos Aires to expand blockchain [#education](#) and adoption.

Further collaborations through ADA Labs for Blockchain Applications (ALBA) &

@cardanosolar.

[Link](#)



July 15 to 26

🕒 9:00 - 13:00

♦ **AIKEN Developers Course** with Robertino Martinez and Karina Lopez from IOG (ALBA)

[Day 1](#)

[Day 2](#)

[Day 3](#)

[Day 4](#)

[Day 5](#)

[Day 6](#)

[Day 7](#)

[Day 8](#)

[Day 9](#)

[Day 10: Final Exam](#)

July 15

🕒 14:00 - 18:00

- ♦ **Demeter.run Workshop (TX-Pipe):** Serverless Middleware for Cardano at @ADALABS_ in @frbautn, taught by Alejandro Guillermo Avagnina and Felipe Gonzalez from @txpipe_tools (ALBA)

 [Link](#)

July 25

 14:30 - 16:30

- ♦ **Marlowe Workshop** with Robertino Martinez and Karina Lopez from IOG (ALBA)

 [Link](#)

July 26

 14:00 - 16:00

- ♦ **Networking with ICP Bootcamp: Cardano + ICP** - Transform your project with blockchain to take it to the next level (ALBA)

 [Link](#)

July 26

 9:00 - 18:00

- ♦ **ADA Souls:** ALDEA partners with Ada Solar and AdaSouls to certify the students of the Smart Contracts course at UTN FRBA.

 [Link 1](#)

 [Link 2](#)

 [Link 3](#)

July 27

 9:00 - 13:00

- ♦ **Workshop of @aiken_eng in Testing** with Robertino Martinez and Karina Lopez from IOG (ALBA)

 [Link](#)

July 29

 17:30 - 20:30

- ♦ **ALBA Graduation Ceremony** with the presence of Charles Hoskinson at Aula Magna and Aggelos Kiayias and Philip Wadler remote presentations from Edinburgh University.

 [Link1](#)

 [Link2](#)

 [Link3](#)

July 30

 18:00 - 21:00

- ♦ **Gamechanger Workshop: Are You Building Web 2.9 or Web 3?**

From theory to practice—building on Cardano based on values and avoiding the pitfalls of the past (ALBA)

 [Link](#)

August 3

 14:00 - 20:00

- ♦ **Intersect: Constitution Workshop** with Jose Iadicicco, Juan Sierra, Rodrigo Oyarzun, and Sebastian Castellano (3 Cardano Ambassadors).

 [Link](#)

November 30rd and December 1st

 9:00 - 18:00

- ♦ **Midnight Hackathon:** With Diego Lizarazo and Claude Barde from Midnight team, and 60 participants.

 [Link 1](#)

 [Link 2](#)

December 2nd

 14:00 - 18:00

- ♦ **Hackathons Awards Ceremony:** With Charles Hoskinson and Frederic Gregaard.

 [Link 1](#)

 [Link 2](#)

 [Link 3](#)

List of Challenge KPIs and How the Project Addressed Them

1. Participation Rate of Youth and Adults in Formal and Non-Formal Education:

- ALBA provided blockchain education to a diverse group of students and professionals.

- Conducted specialized training in Aiken and smart contract development.

2. Parity Indices for Education Accessibility:

- The project actively included participants from multiple countries (Argentina, Chile, Venezuela, Peru among others) and backgrounds.
- Provided equal opportunities for men and women to engage in blockchain education.

3. Mainstreaming Blockchain Education into Formal University Curricula:

- Established a partnership with UTN to integrate blockchain education into academic programs.
- Created educational materials and structured learning programs in collaboration with IOG.

4. Expanding the Cardano Ecosystem:

- Installed a fully operational Cardano node within UTN to provide hands-on experience.
- Hosted a Hackathon on Midnight protocol to drive innovation and new use cases.

List of Project KPIs and How the Project Addressed Them

1. Number of Participants Trained:

- 20 students successfully completed the Aiken developer course.
- Engaged 37 participants in the Midnight Hackathon.

2. Development of Open-Source Materials:

- Educational content created in collaboration with IOG (Aiken Developers Course) and CF (Cardano Academy).
- Hackathon projects documented and shared via GitHub for future community use.

3. Community Engagement and Outreach:

- Hosted multiple workshops with industry experts.

- Graduation ceremony attended by Charles Hoskinson and other notable figures.

4. Infrastructure Development:

- Created a dedicated blockchain lab at UTN.
 - Installed a physical Cardano node contributing to decentralization.
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Key Achievements (Collaboration & Engagement)

- **Partnerships Strengthened:** Signed agreements with UTN, CF and IOG for continued blockchain education initiatives.
 - **High-Impact Events:** Successfully conducted a large-scale hackathon on Midnight, fostering real-world applications.
 - **Community Recognition:** ALBA became a reference model for blockchain education in Latin America.
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Key Learnings

- **Adoption Challenges:** Introducing blockchain concepts to academic institutions required extensive engagement and clarification.
 - **Technical Barriers:** Some participants had difficulty adapting to Aiken, highlighting the need for preparatory resources.
 - **Scalability Considerations:** The model established with UTN can be replicated in other universities with strategic funding.
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Next Steps for the Product/Service Developed

- **Expansion of ALBA Network:** Extend blockchain education to other Latin American universities.

- **Further Research & Development:** Implement more blockchain applications in educational and public-sector use cases.
 - **Additional Funding & Partnerships:** Seek further funding to scale infrastructure and improve accessibility.
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Final Thoughts/Comments

The ALBA project represents a milestone in blockchain education, proving that with dedication, collaboration, and vision, it is possible to bring cutting-edge technology to academic institutions and communities. What began as an ambitious idea has now become a concrete reality, empowering students, developers, and professionals with the knowledge and tools to contribute meaningfully to the Cardano ecosystem.

This journey has not been without its challenges, but each obstacle reinforced our commitment to decentralization, education, and innovation. The partnerships established with UTN, IOG, and the broader Cardano community will continue to fuel this mission, ensuring that ALBA's impact extends far beyond this initial implementation.

As we look to the future, we see a growing network of educational institutions embracing blockchain technology, a thriving community of learners and builders, and an evolving ecosystem strengthened by collaboration. ALBA has set a precedent, and its success paves the way for future initiatives that will further bridge academia and blockchain development.

We extend our deepest gratitude to everyone who contributed to this project—our partners, educators, students, and the Cardano community. This is just the beginning, and we are excited for what lies ahead.

Links to Other Relevant Project Sources/Documents

GitHub Repositories of Hackathon Projects:

Project Overview

- **Total Participants:** 30
- **Total Projects Developed:** 5
- **Top Projects Highlighted:** 3

Project 1 (1st Prize): Team Fran and The Redeemers from Tx Pipe

- **Team:** 3 members
- **Project:** Built a DAO-focused voting system.
- **Github repo:** <https://github.com/FranZavalla/hackaton-midnight>

Project 2 (2nd Prize): Team Eddalabs (Erik Romero and Taina Bugs)

- **Team:** 2 members
- **Project:** Created a voting feature for integration with the Mesh Multisig platform.
- **Github repo:** <https://github.com/ErickRomeroDev/cardano-complete-node-mid>

Project 3 (3rd Prize): Team Root Solutions from Protofire

- **Team:** 3 members
- **Project:** Developed an identity voting DApp leveraging Midnight's ZK-powered data protection.
- **Github repo:** <https://github.com/manupadillaph/midnight-identity-voting>

Judging Criteria

1. Technical Innovation (35%)
2. Practical Applicability (25%)
3. Presentation Quality (20%)
4. Potential Ecosystem Impact (20%)

Signatures

- Event Coordinator: Kehua Yang
- Technical Lead: Jose Iadicicco
- Midnight Specialists: Diego Lizarazo and Claude Barde
- Date: December 2, 2024

Educational Material:

[Cardano Developers Course \(IOG\)](https://github.com/iog-edu-argentina-2024/cardano-dev-2024)

<https://github.com/iog-edu-argentina-2024/cardano-dev-2024>

[Cardano Academy \(CF\)](#)

UTN Partnership Agreement:

CONVENIO MARCO

Entre "ADA SOLAR", representada en este acto por José Javier Iadicicco, CUIT 20279411006, con domicilio en Ballivián 2158 (CABA), en su carácter de CEO por una parte, y la **Facultad Regional Buenos Aires de la Universidad Tecnológica Nacional**, en adelante "FRBA", con domicilio en Medrano 951, Ciudad Autónoma de Buenos Aires, Argentina, representada por su Decano Ing. Guillermo José Oliveto, por la otra, acuerdan celebrar el presente CONVENIO MARCO para promover en forma conjunta acciones tendientes al mejoramiento de la calidad, creando lazos de colaboración recíproca en los campos Académico, Científico y Cultural, que se regirá por las siguientes cláusulas:

PRIMERA: La FRBA y ADA SOLAR de común acuerdo, diseñarán y desarrollarán programas de cooperación y asistencia técnica, capacitación o desarrollo en todas las áreas de mutuo interés.

SEGUNDA: Cada una de las acciones que se decidan implementar serán establecidas en Convenios Específicos que las partes acuerden, establecerán los objetivos, actividades a desarrollar, un cronograma de trabajo, el presupuesto correspondiente, la forma de pago y los responsables de la dirección y ejecución de las tareas, se anexarán al presente y lo integrarán una vez aprobados por las autoridades superiores que correspondan.

TERCERA: El presente Convenio tendrá una duración de 1 (UN) año a partir de su celebración. A su término se renovará automáticamente, a menos que una de las partes comunique a la otra en forma fehaciente y con una anticipación de no menos de 3 (tres) meses su voluntad de rescindirlo. No obstante, ambas partes se reservan el derecho de rescindirlo unilateralmente sin que ello origine responsabilidad alguna, debiendo comunicarlo fehacientemente con una antelación de no menos de 1 (un) mes. La rescisión del presente Convenio Marco no suspenderá los Convenios Específicos aprobados cuente o no, con principio de ejecución.

CUARTA: A todos los efectos derivados de este Convenio, las partes convienen someterse a la jurisdicción de los Tribunales Federales de la Ciudad de Buenos Aires y fijan sus domicilios señalados en el encabezamiento del presente.

En prueba de conformidad, se firman tres (3) ejemplares de un mismo tenor y a un solo efecto, en la Ciudad de Buenos Aires, a los 21 días del Mes de Diciembre del año 2022.


ADA SOLAR



Ing. Guillermo Oliveto
Decano

Key Milestones and Achievements:

1. Blockchain Node Installation at UTN:

- Installed the first physical Cardano node at the Universidad Tecnológica Nacional (UTN), overcoming technical and administrative challenges.
- Demonstrated the educational purpose of the node, ensuring alignment with UTN's mission as a public university.
- Successfully contributed to the decentralization of the Cardano network.

2. Establishment of the ALBA Laboratory:

- Equipped and designed a dedicated blockchain laboratory, providing a collaborative space for learning and innovation.
- Themed the laboratory around the Cardano eras, creating a unique and inspiring educational environment.
- Addressed networking and infrastructure challenges within UTN to create an optimal setting for blockchain experimentation.

3. Development of a Comprehensive Curriculum:

- Designed a specialized curriculum in collaboration with the IOG Education Team, focusing on the Aiken programming language and other Cardano technologies.
- Delivered a two-week intensive Aiken course, achieving exceptional student performance compared to global benchmarks.
- Conducted workshops on key topics such as node setup, wallet development, and decentralized application (DApp) creation.

4. Hackathon - Midnight:

- Organized a groundbreaking hackathon on the Midnight protocol during Cardano Tech Week, engaging 37 participants.
- Developed five innovative project prototypes, with three delivered as functional solutions.
- Awarded top projects based on technical innovation, practical applicability, and impact on the Cardano ecosystem.
- Hosted mentorship sessions to prepare participants, providing resources and expert guidance.

5. Graduation Ceremony and Community Engagement:

- Celebrated the graduation of the first ALBA cohort with Charles Hoskinson, Cardano's founder, in attendance.

- Issued digital diplomas as NFTs through a collaboration with ALDEA DAO's Ada Souls project.
 - Fostered a sense of community and collaboration among participants, instructors, and industry experts.
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Impact and Outcomes:

1. Education and Skills Development:

- Trained 20 students from diverse regions, including Venezuela, Peru, Argentina, and Chile, in advanced Cardano technologies.
- Empowered participants with practical skills in Aiken, smart contract development, and blockchain infrastructure.

2. Community Building:

- Strengthened the Cardano community by fostering collaboration among students, developers, and blockchain enthusiasts.
- Enhanced global awareness of Cardano's educational initiatives and technical capabilities.

3. Innovation and Inspiration:

- Encouraged the development of real-world solutions through hackathons and workshops, showcasing Cardano's potential in various applications.
 - Inspired participants to drive blockchain adoption and innovation in their respective regions.
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Acknowledgments: We extend our gratitude to the following contributors:

- **UTN Faculty and Staff:** For their partnership and support in establishing the laboratory.

- **Robertino Martinez and Karina Lopez from IOG:** For their exceptional instruction in Aiken and curriculum development.
- **Dr. Lars Brünjes:** For his continuous support among the years, and his commitment with quality education.
- **Charles Hoskinson:** For his inspiring presence and support during the graduation ceremony.
- **Frederik Gregaard:** For his vision and dedication to the development of our region.
- **Rafael Fraga:** For his constant support and commitment.
- **JJ Siler:** For his support on this incredible journey.
- **Cardano Confederation (CC):** We extend our sincere gratitude to Cardano Confederation for their unwavering support. Their dedication was exemplified by the participation of community members from diverse countries such as Colombia, Paraguay, Brazil, Venezuela, Peru, Chile, and Ecuador, all of whom traveled to Argentina to engage in the ALBA initiative. Their commitment to strengthening blockchain education and adoption in Latin America has been instrumental in the success of this project.
- **ALDEA DAO:** For their collaboration in issuing innovative NFT diplomas.
- **Professors Philip Wadler and Aggelos Kyaia:** For their inspiring words during the graduation ceremony of the first cohort.
- **Participants:** For their enthusiasm and dedication to learning and innovating within the Cardano ecosystem.

Supporting Data and Documentation:

1. Event Highlights:

- Aiken Developers Course (July 15, to July 26 2024)
- Workshops on Demeter, Marlowe, and Gamechanger Wallet
- Midnight Hackathon (November 30 – December 2, 2024)
- Graduation Ceremony (July 29, 2024)

2. Participant Metrics:

- Total trained: 20 students
- Hackathon participants: 37
- Projects developed: 5 (3 delivered as functional solutions)

3. Resources Created:

- Open-source repositories for hackathon projects
- Educational materials and tutorials for Aiken and Cardano tools

Conclusion: The ALBA project has laid the foundation for a sustainable and impactful blockchain education ecosystem within the Cardano network. By leveraging strategic partnerships, innovative teaching methodologies, and hands-on experiences, ALBA has set a new standard for blockchain education in Latin America. This initiative not only contributes to Cardano's global mission but also inspires continued growth and collaboration in the region.

- **Jose Iadicicco** (Project Lead)
- **Kehua Yang** (Educational Coordinator)
- **Sabrina Liu** (Social Media & Marketing)
- **Yenping Wang** (Coordinator assistance)

Date: December 15, 2024