### CINECA

### Technology powering the future of micro-credentials

A view on Blockchain and Open Badges for Higher Ed

Chiara Carlino, Consultant for Universities at Cineca



#### The main consortium of Italian universities

Born in 1969, CINECA provides technological support for italian universities and research entities, and the Ministry for Education and Research









Ministero dell'Istruzione dell'Università e della Ricerca



## BUILDING A DIGITAL CREDENTIALING PLATFORM FOR ITALIAN HIGHER EDUCATION SYSTEM

Bestr: An experience starting in 2015



Today Bestr is a Digital Credentialing platform

to valorize Lifelong & Lifewide Learning

in and around Universities

integrated with SIS and other University IT systems



**EDCI** - European Digital Credentialing Initiative



### WHAT'S NEXT?

What should we expect (or promote) about microcredentialing and blockchains for education?



# WHAT THE TECH COMMUNITY AND THE PIONEERING UNIVERSITIES ARE DOING IS ALREADY THE FUTURE

It is either going to consolidate or fail (or change).

- Highlighting and making readable abroad experiences, extracurricular competencies, in-company training, language proficiency...
- Recognizing credits for microcredentials through system integration
- Securing credentials through blockchain
- Expressing credentials in different digital formats



#### **OPEN BADGES OPENED PERSPECTIVES**

Stackable degrees





# DIGITIZING THE UNIVERSITY DEGREE: HOW BLOCKCHAIN IS GOING TO REDEFINE BACHELORS

https://blog.bestr.it/en/2019/09/23/digitizinguniversity-degree-how-blockchain-going-redefinebachelors

A vision by Paolo Cherubini, Vice-rector for Teaching and Education at the **University of Milan-Bicocca**, and Daniela Mapelli, Vice-rector for Teaching and Education at the **University of Padua** 

## CHALLENGES FOR OPEN BADGES / MICROCREDENTIALING



Standards

Content readability by humans and by machines

Trust

Adoption rate

## CHALLENGES FOR BLOCKCHAIN IN HIGHER EDUCATION



Beyond notarization

- Blockchain as a Learning Record Store
- Automation through smart contracts leveraging machinereadable standards integrated with Student Information Systems
  - European Blockchain?
  - Educational Blockchain?

Identity

Privacy

Sustainability



# CINECA

Consorzio interuniversitario per il calcolo automatico

Thank you c.carlino@cineca.it