



Interreg
North Sea Region
BLING

European Regional Development Fund



EUROPEAN UNION

Blockchain Based Trustworthy Electronic Voting System

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About Me

- MSc in Computing Science, specializing in ISVC - University of Groningen (Present).
- Worked as full stack- developer for 2 years.
- B.Tech in Computer Science - Amritha Univesity.



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Regarding the Research

Citizen Participation

Moderate or
Organizational Scale
E-voting event

E-voting requirements

Confidential,
Trustworthy,
Authentication/Eligibility
check,
Individually and
Universally verifiable

Other requirements

Secure

Scalable

Not expensive





Relevance of my research

Increasing citizen participation

Single/Unique voting

Decentralized E-voting system

Individually and Universally
verifiable

Secure and Anonymous voting

Fast and free of charge.



GDPR
COMPLIANT

Results...

Milestone 1(Done)

- Secure voting
- Anonymous voting
- Universally verifiable
- Individually verifiable

Milestone 2 (In-progress)

- Authentication of citizen
- Eligibility of citizen
- No linkage of user data
- Integration of both milestone

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Application of some techniques



[1]



[2]

[1] Digital Green Certificates: EU Digital COVID Certificate

Link - https://ec.europa.eu/info/live-work-travel-eu/coronavirus-response/safe-covid-19-vaccines-europeans/eu-digital-covid-certificate_en

[2] Commission proposes a trusted and secure Digital Identity for all Europeans

Link - https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2663

Types of blockchain



Concerns of blockchain

Comparison of blockchain and cryptocurrencies

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Thank You!
&
Questions?

