SECURE BLOCKCHAIN FOR ADMISSION PROCESSING INEDUCATIONAL INSTITUTIONS

Dr. K.S.SADASIVA RAO, Professor,

T. SNEHA, V. AKARSHNIKA, U.DINESH, Y.HARSHA VARDHAN,

SRI INDU COLLEGE OF ENGINEERING AND TECHNOLOGY

Sheriguda (V), Ibrahimpatnam (M), RangareddyDist - 501 510

ABSTRACT

Blockchain technology with its secure mechanism of maintaining data and transactions inshared, immutable, distributed ledgers has become very relevant today and is increasinglyused for financial applications. This paper proposes the use of consortium blockchain andsmart contracts for secure, transparent and automated processing of student applicationsreceived by educational institutions. The students applying for admissions in educationalinstitutions need assurance of a safe, secure and transparent platform that does notcompromise their privacy. On the other hand, educational institutions too need assuranceabout the authenticity of the documents and the applicant. The use of consortium blockchainand smart contracts incorporating business logic for validating, verifying and filtering of validapplications provides a safe and secure platform for processing student applications. Thispaper looks at blockchain application beyond finance and explains how the studentregistration and admission process can be made safe and secure for all stakeholders. It promotes a seamless mechanism with reduced turnaround time and increased security and transparency.

INDEX : block chain , secure mechanism, educational institutions. Validating and verifying , seamless mechanism

1.INTRODUCTION

1.1 Introduction:

Blockchain Technology whose emergence is generally associated with bitcoins is now employed for secure, immutable applications in the sectors like finance, healthcare, governance and businessoperations. This technology has attracted attention as the basis of cryptocurrencies such asBitcoin, but its capabilities extend far beyond that, enabling existing technology applications to bevastly improved and new applications that was not considered practical earlier to be nowdeployed. This paper proposes a secure, smart contract-based autonomous system of studentadmission processing that leverages the inherent security of blockchain technology to provide asecure and

ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

transparent system of processing student applications.Blockchain has been already applied in a few fields in the education sector such as:

a) A record keeping system for certificates and degrees.

b) A system to enhance transactions and payments with security between two parties.

c) A system promoting collaboration between universities.

We propose a blockchain based system for registering, validating and selecting the studentapplications for various university courses. Student applicants belong to different countries whichmay have different educations systems. Besides, different countries may have their own rulespertaining to student visa and the required procedure and documents. Students applying foradmissions are required to submit/upload various forms and documents. While students needassurance of a safe and secure platform that does not compromise the privacy of their data, theeducational institutions too need assurance about the authenticity of the documents and applicant. This paper examines the possibility of using blockchain for a secure, automated smart contractwhich streamlines the admission process and assures both student and university of an unbiased, secure and authenticated process.

2. LITERATURE SURVEY

TITLE: Blockchain beyond bitcoin

ABSTRACT: The origin of blockchain dates back to 1991, when researchers Stuart Haber andW. Scott Stornetta outlined a system to document timestamps that could not be altered. However, it is most widely known as the underpinning of Bitcoin, introduced to the tech world when Bitcoin's pseudonymous creator, Satoshi Nakamoto, referred to it as "a new electronic cashsystem that's fully peer-to-peer, with no trusted third party." Soon after that, Blockchain becamethe next possible bedrock of record-keeping worldwide and the underlying distributed ledgertechnology (DLT) that powers many of the most popular digital currencies.

TITLE: Bitcoin: A peer-to-peer electronic cash system. (2008).

ABSTRACT: A purely peer-to-peer version of electronic cash would allow online payments tobe sent directly from one party to another without going through a financial institution. Digitalsignatures provide part of the solution, but the main benefits are lost if a trusted third party is stillrequired to prevent double-spending. We propose a solution to the double-spending problemusing a peer-to-peer network. The network timestamps transactions by hashing them into

ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

anongoing chain of hash-based proof-of-work, forming a record that cannot be changed withoutredoing the proof-of-work. The longest chain not only serves as proof of the sequence of eventswitnessed, but proof that it came from the largest pool of CPU power. As long as a majority of CPU power is controlled by nodes that are not cooperating to attack the network, they'll generate longest chain and outpace attackers. The network itself requires minimal structure. Messagesare broadcast on a best effort basis, and nodes can leave and rejoin the network at will, acceptingthe longest proof-of-work chain as proof of what happened while they were gone.

TITLE: Blockchain Beyond Bitcoin: Block Maturity Level Consensus Protocol.

ABSTRACT: This paper enlightens the stipulation of blockchain beyond the bitcoin andidentifies the key challenges in the implementation of blockchain on a small scale or newlyimplemented projects based on the literature review, furthermore it also introduces Block maturitylevel (BML) as a Consensus protocol, which eliminates the 51% attack, the hardfork problem andsmall-scale problem by introducing sub-blocks as a defense mechanism against attackers. Thistechnique can be used in the implementation of blockchain where the hash power and difficulty islower and easy to match-up. This proposed consensus protocol would immensely secure theimplementation of the blockchain on different projects.

TITLE: Application of blockchain technology in online education.

ABSTRACT: Blockchain is a data structure of data blocks arranged in chronological order. It isfeatured by decentralization, trustworthiness, data sharing, security, etc. It has been widely usedin digital currency, smart contract, credit encryption and other fields. With the development of theInternet technology, online education, a novel education mode, has been greatly popularized. However, this education mode still faces many problems in course credibility, credit andcertificate certification, stu-dent privacy, and course sharing. Through literature review and case analysis, this paper discusses the basic technical principlesand application features of blockchain technology. The blockchain technology can store learn-ingrecords in a trusted, distributed manner, provide credible digital certificates, realize learningresource sharing with smart contract, and protect intellectual property through data encryption. The research shows that the integration of blockchain technology is a promising trend in thedevelopment of online educa-tion.

TITLE: Exploring blockchain technology and its potential applications for education.

ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

ABSTRACT: Blockchain is the core technology used to create the cryptocurrencies, like bitcoin. As part of the fourth industrial revolution since the invention of steam engine, electricity, andinformation technology, blockchain technology has been applied in many areas such as finance, judiciary, and commerce. The current paper focused on its potential educational applications and explored how blockchain technology can be used to solve some education problems. This articlefirst introduced the features and advantages of blockchain technology following by exploringsome of the current blockchain applications for education. Some innovative applications of using blockchain technology were proposed, and the benefits and challenges of using blockchaintechnology for education were also discussed.

TITLE: Blockchain technology overview.

ABSTRACT: Blockchains are tamper evident and tamper resistant digital ledgers implementedin a distributed fashion (i.e., without a central repository) and usually without a central authority(i.e., a bank, company, or government). At their basic level, they enable a community of users torecord transactions in a shared ledger within that community, such that under normal operation of the blockchain network no transaction can be changed once published. This document provides ahigh-level technical overview of blockchain technology. The purpose is to help readersunderstand how blockchain technology works.

TITLE: Blockchain: Blueprint for a new economy.

ABSTRACT: Bitcoin is starting to come into its own as a digital currency, but the blockchaintechnology behind it could prove to be much more significant. This book takes you beyond thecurrency ("Blockchain 1.0") and smart contracts ("Blockchain 2.0") to demonstrate how theblockchain is in position to become the fifth disruptive computing paradigm after mainframes,PCs, the Internet, and mobile/social networking. Author Melanie Swan, Founder of the Institutefor Blockchain Studies, explains that the blockchain is essentially a public ledger with potential asa worldwide, decentralized record for the registration, inventory, and transfer of all assetsnot justfinances, but property and intangible assets such as votes, software, health data, and ideas. Topicsinclude:Concepts, features, and functionality of Bitcoin and the blockchain Using the blockchainfor automated tracking of all digital endeavors Enabling censorship? resistant organizationalmodelsCreating a decentralized digital repository to verify identity Possibility of cheaper, moreefficientservices traditionally provided by nations Blockchain for science: making better use of the data -mining network Personal health record storage, including access to ones own genomic dataOpenaccess academic publishing on the blockchain This book is part of an ongoing

ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

OReilly series.Mastering Bitcoin: Unlocking Digital Crypto-Currencies introduces Bitcoin and describes thetechnology behind Bitcoin and the blockchain. Blockchain: Blueprint for a New Economyconsiders theoretical, philosophical, and societal impact of cryptocurrencies and blockchaintechnologies.

TITLE: Blockchain Technology in Education System: A Review.

ABSTRACT: Blockchain technology can be used to solve many educational problems and canhelp educators as well as learners to monitor the learning outcomes. The data can be storedsecurely and tamper proof format when it's stored onto the blockchain network. The Blockchainfor Education platform helps us to make the tamper-proof certificates and their correct and theoverall permanent allocation of these certificates to learners, as well as verification of certificates. It can reduce the overall frauds and tampering of the degrees and certificates. Here smart contractscan be designed and deployed on to the Ethereum blockchain that can be designed using thesolidity programming language. Blockchain can be applied to private, public and consortiumsectors depending upon the usage and the scope of the blockchain.

3. PROBLEM STATEMENT

This technology has attracted attention as the basis of cryptocurrencies such as Bitcoin, but itscapabilities extend far beyond that, enabling existing technology applications to be vastlyimproved and new applications that was not considered practical earlier to be now deployed.Blockchain is the core technology used by cryptocurrency, bitcoin, through the maintenance of fimmutable distributed ledgers in thousands of nodes. This was the definition given by SatoshiNakamoto. As the name suggests, blockchain is a single list of chained blocks in which eachblock contains various transactions or some kind of data/information. A blockchain network isknown for its safety and security of data. Each block in the blockchain network mainly containsits own hash value, the data/information and hash value of the previous block.

3.1 LIMITATION OF SYSTEM

Susceptibility to Fraud: Paper applications and manual record-keeping are vulnerable to forgeryand manipulation.Inefficiency: Processing paper applications can be time-consuming and labor-intensive forinstitutions.

4. PROPOSED SYSTEM

ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

In this paper, we address the issue of a secure, transparent, tamper-proof and automated admissionprocessing by proposing a consortium blockchain based autonomous system. We propose to exploit the autonomous feature of smart contract to automate the process of applicationvalidation. The business logic in smart contract validates each stage of application processingsuch that each stage in the process is automatically triggered on the occurrence/completion of atask/stage. This system makes the admission process efficient and secure by addressing the following keyproblems: i) How can we streamline the entire process making the process more meticulous and efficient?ii) How can we authenticate documents received?iii) How can we filter out applications based on specific criteria?iv) How can the stakeholders i.e. the applicants and the institution be assured about the security of the data?Student Application processing typically involves the following steps:

Applicants apply online for admissions to educational institutions. They do so byregistering/filling in the requisite online application form. They are required to provide personaldetails, academic/educational data, recommendations, digital credentials 1 issued by thequalifying universities, financial statements and proof of payment of application fees. The consortium blockchain gets notification of this application or transaction. The smartcontract which works on the 'if-this-then-that' logic filters and selects the valid applications. Since smart contracts are deterministic in nature, they can be run on any node and they yield thesame output for the same input. The filtering of applications takes place on the basis of the criteriadefined, for example the number (correct number) of documents submitted, the nationality of theapplicant, financial standing and minimum score/grade. Smart contracts have the feature of beingautomatically executable and enforceable. The completion of one task/step automatically triggersthe next step, thereby resulting in the execution and fulfilment of the smart contract.

ADVANTAGES:

Enhanced Security and Immutability: Data stored on a blockchain is encrypted and distributed across a network of computers. This makes it tamper-proof and nearly impossible to alter or forgedocuments, significantly reducing the risk of fraud.Data Privacy and Control: Students can have more control over their data on a blockchain. Theycan choose what information gets shared with institutions and track its use. This fosters trust and empowers students to manage their educational records.

5. METHODOLOGY

The blockchain-based admission processing system can be organized into several key modules tofacilitate its functioning. Here are five essential modules:

User Registration and Authentication Module:

This module manages the registration of users, including both students and educationalinstitutions, on the blockchain platform.Implements a secure authentication mechanism to verify the identity of users and preventunauthorized access.Establishes a user profile with relevant information for seamless participation in the admissionprocess.

Application Submission Module:

Facilitates the submission of student applications through a user-friendly interface.Integrates smart contracts to validate and standardize the submitted information, ensuring thatapplications meet predefined criteria.Manages the secure storage of application data on the blockchain, maintaining an immutablerecord of submitted documents.

Document Verification and Validation Module:

Utilizes smart contracts to automate the verification of documents submitted by students.Implements business logic for validating the authenticity of academic transcripts, certificates, andother required documents.Flags and filters out applications with discrepancies or fraudulent information, ensuring theintegrity of the admission process.

Decision and Approval Module:

Involves smart contracts to automate decision-making processes, incorporating predefined criteriafor admission. Allows educational institutions to review and approve/reject applications based on established admission policies. Records decisions on the blockchain, providing an auditable and transparent trail of the admissionoutcomes.

Audit and Reporting Module:

Provides tools for auditing the admission process, offering insights into system activities, decisionmaking, and user interactions. Generates comprehensive reports for educational institutions and administrators to assess the efficiency and fairness of the admission process. Ensures compliance with regulatory requirements and supports continuous improvement throughdata analysis.

6. SYSTEM ARCHITECTURE



7.RESULTS ANALYSIS





* Stockdule, Bend Advision 7 * +				
+ · · · · · · · · · · · · · · · · · · ·	megalhalion		ا ± ۹	a heopete
	Registra	ation Form		
	Tour News	Futnerhana		
	Logi	Prove Number		
	dd-тит-үүүү 🗖 Рим оганач	5m		
	Choose File No file chosen	Fernance C Hose C DDate:		
	Passant			
🖬 🖉 Search 🛛 🚮 🖬 🗖	Already have a	n account ? legin	~ @ W	00 THE GADDAM E

Bodichuty Bood Admisson (* 8. *		
C 🖨 🛈 127.0.0.1.9000/man-studentlogin		9. 12 🗄 🕮 🖨 Prosperte
	User Login	
	Don't Have Account? SignUp	
Students login	Information Link Contact Deta	sits
O Second and an an an		∧ 0 to til 0.6 ¥344







ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

• C A O 12	51000-2330300V-943mi							The st modern
DMISSION OCESSING 🖲	×							& Admi
Admin w		Send and sizes	Studesta 3 E Last 24 Faces	Penting Applications O	× Tainet ())	annada Agantania 2 1		
Student Managentent Spälltations Management Course Management								
					Þ			
O Search Richterve Based Aderice	1914 H	i <u>e in</u> a	1 8 9 F 7 2	8 8 1		_	∧ ĝ t	2 (10 1746 OKITAM - Cl
D. Search Reciciours Bound Adverse 다 요 @ 12 DMISSION	1995 H	ri-viewetudeorf	1 .e a p 💌 2	8 8 1			∧ @ E q ☆ _£	2 (1) FNG 0621000 - O C A Trecepto O At Trecepto
P. Search Redator Based Adviso C D 0 12 DMISSION DCESSING	4445 × + 7.0.0.1.5000/sdm ×	ir-viewitkußerd	<u> </u>	¥ # <u>2</u>		_	× ق 1	- C C & this biotism C & theoryalis & Admin
P. Search Beckstein Bauel Adrive C D Q 12 DMISSION CCESSING	anst # + 7.0.0.1.5000/admi	er-vénweltusferri	<u>d 8 a</u> F e 2	View S	tudents	-	ू हू ह २ क्षे डे	- O A teogeta Admin
C Q O 12 DMISSION CCESSING	4000 1 20 + 7.0.0.1.0000/sdm X 7.0.1.0000/sdm	ier-viewatudeorf	.Enet	View Status	tudents Course	· · · · · · · · · · · · · · · · · · ·	् क के के	a da ma actuar - a R transito R Atmar
P. Search Recentation Based Admin C D 0 12 DMISSION CCESSING (*) Admin T Admin T T T T T T T T T T T T T	Ans: * + 7.0.0.1.3000/sdm X True here poteksors	te-viewaktudent Ester Name amjerte	Enst Losson regretant	View S 9912221027	tudents Coarse magn	authors Machanitan	د به ق د به ک ده ته د	 del SNG Dectume - O A trecepto Admin Last, qual fuzzone
Search Search Cockethaire Based Advise Cockethaire Based Advise Cockethaire Based Avrese T Satisfuerard Redeet Management Satisfuerard	Anne Contraction of the second	te-vtewitkaderd	Enati Desessor reženskom recessor reženskom	E335827995	tudents Course Maen Des Sciette	sattas:	a the second sec	2 (1) THE DETUM
Search Reckelware Baued Advise C D O C D O C C D O C	Anne I C + + 7.0.0.1.0000/radous X Freet Name Codebasets face face face face	Er-sterNation	Email Email consecution etgeneticion rectatione dignaticion	View 5 Wasse 9912221007 2542502334	tudents Course maren Dess Science SECK		 A Q € A ★ ± caroteass caroteass caroteass 	2 (4) THG 04275000 - 0 C 4 Incegolity 2 Admin Larr quel Plantese Larr quel Plantese C 5 C 5 C 5 C 5 C 5 C 5 C 5 C 5 C 5 C 5
P. Search Rocketurin Breed Advisor C. Q. Q. 12 DMISSION COCESSING Azrea 	Kent X + 7,0,0,1,0000/udm X Yuur Name oobbooks Make Make Make Make Make Make Make Make	Ere-viewstusderd Frather Klane grogens rgoman	Eneal control of grant con Nuclear not grant con Nuclear not grant con	View 5	tudents Course Mawn Data Science MCK		A Q to A to Constants Cons	a di 1746 0421.444 - a 2 di 1746 0421.444 2 di 2 dicensità 2 di 2 di 2 dicensità 2 di 2 di 2 di 2 di 2 dicensità 2 di 2 di

ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

★ → C ⊕ © 127	ani X + AQ1800(/admin-viewpendingappication			- 0 X €,☆ [] ∯ heagette ::
ADMISSION PROCESSING	20			🔱 Admin -
Admin				
Search I		View Pending Ap	oplications	
Devitionant Soutres Management Applications Varagement Course Management	Your Name - Eather Name - Ersail Name - Reprisent - Readstansatiggenet	Mobile Course additor	onditates Las qualification	e verify Verification Status
Transferred Frank			b	
D Search	n 🔿 🖮 🛛 🖉 🥖	0 F T Z E E L		୍ତି ଅପ ଶ୍ରୀ ମନ୍ତ ଲାଅନ୍ୟା 🛱
 ✓ ■ Technin Read Administ ← → ⊂ ⊕ © 127/ ADMISSION PROCESSING ● 	nii * + 0.0.1.5000/www.ky_appi/sation/131 ×			- C × 9, 12 (1) Henspeito (1) 2, Admin -
& Admin				
Sarah 6		Verified Through	Blockchain	
	Block 1	Book 2	Block 3	1
Destrocerd Student Wanagement	962528331526413222cee8872375e491142645 #T10%567472059320d1ce5e	12064146053053074651084019544146300087 471585739541001628944051	00378303843000034887341800a0a850080 e005e4003be7e081838704%2	594
Course Management		Accest		
till ,Ø Search	(11) · · · · · · · · · · · · · · · · · ·	9 # • Z = <u>1</u>		스 호 45 48 RN6 RM2244M 📮
· Backthein Based Administ	ul × +			- a ×
ADMISSION	0.0.1.8000/admin-viewpendingsoptication			् 🖈 🔲 🏦 incognite ा र् तdmin -
Admin				
Tanta C		View Pending Ap	oplications	
Destribuerd Southers Management Applications Management Course Wanagement	Your Name Father Name Email Ind Sunal Ahon musrathrone1219 Page T c11	Mobile Course audhaar gmesi.com 764295334 MCA	omitans Let qualification	n werdy Verification Status
2 ,D Search		9 F 💌 Z 🕮 🛎 🛓		~ Ə ¥⊐ ¢≬ ING Me3tam 📮

ISSN: 2278-4632 Vol-14, Issue-7, June: 2024

THE REPORT OF TH								La se mogra
OCESSING	×							S Adr
Admin 								
í.	. e			verified Throug	п віосксп	am		
	Slock 1		Shark 2			6 lock		
eliboard	0145423240421 #167256ce01a	588#74077*0c13###### 20030013206#	e1986/27 1682848280415c%119 c7037818040827411085	9#15001#1831664;5:0041 #21#5	99127601 81661613	lTeoeclic14c6at Babrina a6867c1ecen3c1	HafSeC173210	
plications Management								
une Maragement								
		Th	e Data has bee	n tamper	ed in E	Blockchai	n Networ	k
					D			
					10			
) Search	11 in 1	i 👱 🖻 🖻	<u>. 1</u> 🕫 💌 💈	¥ <u>1</u>				RII (1)(LING GRORIAN
D Search	10 kg	it 💽 🕅 🛤	<u>-1</u> P 🛛 P 👂 2	¥ <u>1</u>			^ ĝ	ita di) ling depena
9 Search	19 1 4	i 💽 📾 🖴	<u>1</u> P 7 F 2 2	¥ 1 1			^ ā	RD QU ENG ORZEAN
) Search	11 A	it 💽 🛤 😫	<u>.</u>	¥ <u>1</u>	_	_	^ ē	на ф) има окрили
) Search Thickchain Favor Admin	uin I X +	# 💽 🛤 😫	1 P 7 F 1 Z				^ @ ·	илсно ант (10 сн
Search Buckdain-Rosel Admin	anian X + 270.0.1-9000/sectors	t 💽 🛅 🖬	1 P 7 F 2	■ <u>1</u>			л ф.	wussi ani (p ci a ingani ∰ 10
Search Backdain Issael Admin C D Q 1:	uuin X + 27.0.0.1-8000/semi	t 💽 🛤 🗳	ion	* * .			^ Ð < \$	на с) (на селин — С
Search C G O 1: MISSION (=)	ania 1 X + 270.0.1-8000/admin	n vlewmalidageticat	iten	* * .		_	~ Ə < \$	میں جون میں (دو دی - م ایومینا بھ ال
Search C A O 1 MISSION CESSING	270.0.1 5000/admin	n vlewmahdapplicat	1 P 7 P 2	■ <u>►</u> <u>►</u>			^ ⊕ € ☆	مدید (۵ دید (۵ دی سرید (۵ دید (۵ دی در بید (۵ دی در بید (۵ دی
Search Backhar Australia C A O 1 MISSION CESSING	1000 1 × + 27.0.0.1.0000/admin	11 💽 200 😫	1 P 7 P 2 Z				^ ⊕ ·	مدیدجاہ عمد (ن 15 مل - میں بی ایس میں ایک مل میں بی ایس میں
Search Backchain Based Admin C A O 17 MISSION CESSING	10000/140mi 27.00.1 5000/140mi	n vlewmalataggilicat	ten				 ↓ ↓ ↓ ↓ 	مدیدجاہ عمد (ن 15 مل ۵ ۵۹ یک انہوں کی میں
Search Backchain Boost Advin C A O 1 MISSION CESSING	unia: X + 27.0.0.1 5000/admin	n vlewmalatageticat	ten	♥ ■ 🛓	pplication	E.	 ↓ ↓ 	15 с) (ни оксили - с С ф інсерні & ла
Search C. Q. Q. 1: MISSION CESSING (=)	anian X + 27 0.0.1 5000/admin	n-vlewmaladapplicat	ian	♥ ■ 土	pplication		 ↓ ↓ ↓ ↓ 	на () 1946 онгоном — О П ф Incogni & Аст
Search C C C C T MISSION CESSING	autor X + 27 0.0.1 5000/admin	n-viewmalatappilicat	tion	Tiew Invalid A	pplication Course	15 eachtear	 A A A A A A A 	на од тико оналили — о П ф тикори 2 Ал Сана, quel Постона
Search C C C C T MISSION CESSING	evices X + 27.00.1 5000/admin 20 Vear Nerve costboos	n-vlewmaladapplicat	ton Envil cotroccinignet.con	E E E	pplication Course mach	andrase	ernflower	- 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0
Search C. Q. Q. 17 MISSION CESSING The Second and Management.	autor X + 27.00.1 5000/admin 20 Vear Nerve rodeboors	n-vlewmaladappiloat	ton Envil cotrock/higmel.con	View Invalid A Masse 9912221087	pplication Course mach	autor	A ₫	10 ф (на акони – а О ф (на кори 2 ла 2 ла 2 ла 2 ла 2 ла 2 ла 2 ла 2 ла
Search C. Q. Q. 17 MISSION CESSING The second are Management totation Management	Notes X + 27.00.1 5000/admin 20 Vest Nerve robebools rete surel	n-vlewmaladappiloat	Ion Ion Intel cotococinignet.con	View Invalid A Masee 9912221987	pplication Guess mach	autor	A ₫	E qo ins accus C A incepti C
Search Search Search Search Second Second Second Second Second Second Second Second Second Second Second Second Second Sec	voider X + 27.00.1 5000/admin 2X Vour Nerre Ostebools met sunsi	n vlewmalklappiloat	Don Innel Codecock/hBgmail.com	View Invalid A usee 991221087	pplication Course mem Mos	estimer Assize They Second	certificates	
Search Search Search Search Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second Second S	unitien X + 27.00.1 2000y/admin X X Vour Name OSEbools met sumat	r viewmaiklapplicat	ton Free cosecociritigmeticon ruserphases1213gmeticon	View Invalid A Mater 9912221967	pplication Course mach MCs	and there And a state of the s	centiticares	E qui ins accum C qui ins accum C qui the free C qui the fr
Search . C C C C T MISSION C CESSING C Mission C Mission C Mission C Mission C CESSING C CESSING C CESSING C CESSING C C CESSING C C C C C C C C C C C C C	volation () X (+ 27.00.01.9000/j.edmini 2X Volam Nieme Codeboors mittautual Page 1 (F1)	n-viewmaaladaggelidat Fether Nerre program	tion Invel sodesookinitginal.com	View Invalid A vestoreset	pplication Course mach MGA	autras autras	Carthones Carthones	40 () (1955 (1424) — 0 — 0 — 0 — 0 — 0 — 0 — 0 — 0
Search	View Nerve Page 1 of 1	n-viewmaistoppficat	tion Invest nueseptienes 121 gynei cam	View Invalid A Mater 99/222/087	pplication Course mats MDP	estrer Aserony	e de certificates	
Search	Vear Nerre Carebook Page 1 (F)	Tether Neme	tion Tree Content of 11 () grant care	E 2010 <pe 2010<="" p=""> E 2010 <pe 2010<="" p=""> E 2010 <pe 2010<="" p=""> <pe 201<="" td=""><td>pplication Course mach MOL</td><td>autor Association Sector</td><td>certificates</td><td>AD QQ INS ADDAMA</td></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe></pe>	pplication Course mach MOL	autor Association Sector	certificates	AD QQ INS ADDAMA
Search Reactchain-Bused Advent C C (0) S MISSION CESSING P Mission Advent Advent Advent Advent Advent Advent	Vision Nerrie Page 1 of 1 Page 1 of 1	r viewmaindopplicat r tether Neme projects titter	ton Inst Inst Instantion	CView Invalid A Mates 9912221967 794200094	pplication Course mem MOR	estituer Accientation Constantion	certificates	
Search Readedhain-Russet Advent C. Q. Q. 17 MISSION CESSING Prefix biboard tert Management cae Management	United X + 27.00.1 2000/admin 2X Vour Nerre Otheroons ret parall Page 1 of 1	Fetter Nerre Drojectili	tion)	View Invalid A Mase 9912221987	pplication Course mach Mos	anter Anter Descriptions	centitures	

🖬 🔎 Search 🛛 🚮 🔄 🛱 🛤 💶 🖗 👿 🗷 🖉 🖉 🖉 🖉 🖉 🖉

C G O I	27.0.0.1.000(/admi	n-viewaccepted					۹. 🖈	A lengelte
ADMISSION PROCESSING	×							💄 Admin -
Admen -								
Search	e.			View Accep	oted Applicati	ons		
	Your Name	Father Name	Email	Multile	Course	anither	antificates	Last_qualifications
Destionant Student Management	fazai	Same .	fatalismal@gnat.com	2535687988	Date Science	aws	-	
Applications Wanagement	Fage1 of 1							
Course Nanagement								
				D				
Ø Search	and a			2 2 2 2 1			~ G @	OIÓ ENG GROAM

8. CONCLUSIONS

Consortium blockchain for student application processing provides a secure, transparent, autonomous and process based platform for admissions to educationalinstitutions. The proposed blockchain-based student application processing systemtakes advantage of the inherent security features of consortium blockchain, and proposes the use of smart contract for automating the different steps involved in thevalidation and verification of applications. This paper also examines the potential benefits and limitations of such a system.

9. REFERENCES

[1] Underwood, S. (2016). Blockchain beyond bitcoin.

[2] Nakamoto, S. (2008). Bitcoin: A peer-to-peer electronic cash system. (2008).

[3] Nonprofit Tech for Good: Nonprofit Tech for Good is a website that provides resources and insightson technology for nonprofits, including online fundraising strategies and tools. Visit:

https://www.nptechforgood.com/

[4] Sun, H., Wang, X., & Wang, X. (2018). Application of blockchain technology in online education. International Journal of Emerging Technologies in Learning (iJET), 13(10), 252-259.

[5] Chen, G., Xu, B., Lu, M., & Chen, N. S. (2018). Exploring blockchain

technology and its potential applications for education. Smart Learning

Environments, 5(1), 1.

- [6]] J. Wang and Y. Dong, "Measurement of text similarity: A survey," Information, vol. 11, no.9, p. 421, Aug. 2020.
- [7] https://users.cs.fiu.edu/~prabakar/cen5079/Common/textbooks/Ma
- stering_Blockchain_2nd_Edition.pdf
- [8] K. Sirts and K. Peekman, "Evaluating sentence segmentation and word Tokenization

systems on Estonian web texts," in Proc. 9th Int. Conf. Baltic (HLT) (Frontiers in Artificial

Intelligence and Applications) vol. 328, U. Andrius, V. Jurgita, K. Jolantai, and K. Danguole,

- Eds. Kaunas, Lithuania: IOS Press, Sep. 2020, pp. 174-181.
- [9] https://blockchain.intellectsoft.net/blog/how-the-consortiumblockchain-works/

[10] G. Grefenstette, "Tokenization," in Syntactic Wordclass Tagging. Springer, 1999, pp. 117– 133.