

Curriculum vitae Europass



Informații personale

Nume / Prenume | Stoicu-Tivadar Lăcrimioara

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Naţionalitate(-tăţi) Română

Data nașterii 16.02.1961

Sex Feminin

Locul de muncă vizat / Domeniul ocupațional

Profesor univ.

Experiența profesională

Perioada 2005-prezent,

Funcția sau postul ocupat | Profesor (conducător teze de doctorat în domeniul Calcuatoare și Tehnologia Informației, 2007)

Activități și responsabilități principale | Predare, cercetare, organizare

Numele și adresa angajatorului Universitatea Politehnica Timișoara, Facultatea de Automatică și Calculatoare, Departamentul de

Automatică și Informatică Aplicată

Tipul activității sau sectorul de activitate Automatică, Informatică, Calculatoare și Tehnologia Informației

Perioada | 1990 - 2005

Funcția sau postul ocupat Asistent (1990-1995), șef de lucrări (1995-2000), conferențiar (2000-2005), doctor (1999)

Activități și responsabilități principale Predare, cercetare

Numele și adresa angajatorului Universitatea "Politehnica" Timișoara, Facultatea de Automatică și Calculatoare, Departamentul de

Automatică și Înformatică Aplicată

Tipul activității sau sectorul de activitate | Automatică, Informatică, Calculatoare și Tehnologia Informației

Perioada | 1989-1990

Funcţia sau postul ocupat Inginer cercetător

Activități și responsabilități principale | Cercetar

Numele și adresa angajatorului | Institutul Poitehnic "Traian Vuia" Timișoara, Facultatea de Mecanică

Tipul activității sau sectorul de activitate | Elaborare programe

Perioada 1987-1989

Funcţia sau postul ocupat | Inginer cercetător

Activități și responsabilități principale | Cercetare

Numele şi adresa angajatorului Institutul pentru Proiectări în Automatizări, Filiala Timişoara

Pagina / - Curriculum vitae al Nume Prenume | Pentru mai multe informații despre Europass accesați pagina: http://europass.cedefop.europa.eu © Comunitățile Europene, 2003 20060628

Tipul activității sau sectorul de activitate

Perioada

Dezvoltare programe 1985-1986

Funcția sau postul ocupat

Inginer

Activități și responsabilități principale

Service

Numele şi adresa angajatorului

Uzina Constructoare de Maşini Reşita

Tipul activității sau sectorul de activitate

Service echipamente de calcul

Educație și formare

Perioada

1980-1985

Calificarea / diploma obtinută

Inginer, specializarea Automatică și Calculatoare

Disciplinele principale studiate / competente profesionale dobândite

Calculatoare de proces

Numele și tipul instituției de învățământ / furnizorului de formare

/ turnizorului de formare Nivelul în clasificarea națională sau Institutul Politehnic "Traian Vuia" Timișoara, Facultatea de Automatică și Calculatoare

internațională

Aptitudini şi competenţe personale

Limba(i) maternă(e)

Română

Limba(i) străină(e) cunoscută(e)

ă(e) Engleză

Autoevaluare

Nivel european (*)

Limba
Limba

Înțele	gere	Vorbire		Scriere	
Ascultare	Citire	Participare la conversaţie	Discurs oral	Exprimare scrisă	
C1	C1	C1	C2	C1	

^(*) Nivelul Cadrului European Comun de Referință Pentru Limbi Străine

Competențe și abilități sociale

Sociabil, comunicativ, cu capacitate de relaționare în colective interdisciplinare

Competențe și aptitudini organizatorice

Bun organizator/coordonator, inovativ, fiind:

Președinte al Comisiei de Învățământ a Senatului Universității Politehnica Timișoara

Coordonez activitatea unui grup de 3 asistenți și 3 doctoranzi

Presedinte al Federației Europene de Informatică Medicală (2018-2020)

Coordonator al EFMI WG Healthcare Informatics for Interregional Cooperation (2003-2018)

Presedintele Societății Române de Informatică Medicală (2010-2018)

Președintele Comisiei de Informatică Medicală a Ministerului Sănătății (2006, 2016,2018)

Membru fondator (2006) și Vicepreședinte HL7 Romania (2016-)

Membru IEEE Professional Communication Society (2007-)

Responsabil program Master Sisteme Informatice în Îngrijirea Sănătății, UPT

Coordonator al activității academice la Învățământ la distanța la Facultatea de Automatică și Calculatoare (2008-)

Abilități bune de organizare dobândite ca Secretar al EFMI (2011-2014) și vicepreședinte al EFMI (2014-2018)

Abilități bune de organizare dobândite ca editor de volume internaționale de lucrări și organizator științific de conferințe internaționale (as STC 2011, STC 2014, MIE 2015) și recenzent de conferințe și reviste

Abilități de coorodnare rezultate ca

- Director de granturi, Responsabil partener proiecte naționale,
- Colaborator în proiecte naționale/internaționale, evaluator/expert proiecte internaționale (EHR Serbia 2008, CASA Suedia 2014), profesor invitat (Croatia, nov. 2015), COST (EU 2016-2020)

Competențe şi aptitudini tehnice
Competențe şi aptitudini de utilizare
a calculatorului

Competențe şi aptitudini artistice

Alte competențe şi aptitudini
Permis(e) de conducere

Informații suplimentare

Anexe Lucrări ISI 2016-2018

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Print

Title: IT Complex Solution Supporting Continuity of Care

Author(s): Crisan-Vida, M (Crisan-Vida, Mihaela); Barbut, L (Barbut, Liliana); Barbut, A (Barbut, Alexandra); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara) Edited by: Balas VE; Jain LC; Balas MM

Source: SOFT COMPUTING APPLICATIONS, SOFA 2016, VOL 1 Book Series: Advances in Intelligent Systems and Computing Volume: 633 Pages: 308-315 DOI: 10.1007/978-3-319-62521-8_25 Published: 2018

Abstract: The paper presents a lab tests information system with two modules: a desktop one (for laboratory staff) and a web application accessed by the patient on different devices (Smartphone or Tablet). Continuity of care is ensured through cloud computing (Windows Azure) and standardized communication (HL7 Clinical Document Architecture). The benefits of the system are that the laboratory results are always available for the medical staff or the patients; in case of emergency the medical staff has access to patient lab results history and may improve the patient treatment based on the evolution of the lab results.

Accession Number: WOS:000433138300025

Conference Title: 7th International Workshop on Soft Computing Applications (SOFA)

Conference Date: AUG 24-26, 2016 Conference Location: Arad, ROMANIA

Conference Sponsors: Aurel Vlaicu Univ Arad, Univ Belgrade, Romanian Acad, Iasi Branch, Inst Comp Sci, IEEE Romanian Sect, Romanian Soc Control Engn & Tech Informat, Arad Sect, Gen Assoc Engineers Romania, Arad Sect, BTM Resources Arad

ISSN: 2194-5357 elSSN: 2194-5365 ISBN: 978-3-319-62521-8

Record 2 of 11

Title: Profiling In Obstetrics For Premature Birth Risk Patients

Author(s): Lupse, OS (Lupse, Oana Sorina); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara)

Book Group Author(s): IEEE

Source: 2017 IEEE INTERNATIONAL CONFERENCE ON E-HEALTH AND BIOENGINEERING CONFERENCE (EHB) Book Series: E-Health and Bioengineering Conference Pages: 289-292 Published: 2017

Abstract: There is a diversity of risk situations for pregnant women resulting in premature birth endangering the newborn's life. The pregnant women are monitored by physicians benefiting their experience in last months of pregnancy to predict certain risks in premature birth. The paper presents a solution to prevent high risk situations, using ontology as support in profiling pregnant women with possible pregnancy risks. Based on ontology and available medical database of one of the largest maternity hospitals in Timisoara (Bega) we create profiles of women focusing on cases with problems and high potential risks, using as tool the open source Protege for ontology and Visual Studio. Net for the supporting application. The ontology creates links between the characteristics of pregnant women, medical history, disease and possible problems that may occur during pregnancy. The ontology is used in an application stored in cloud to be accessed by physicians from different locations. Based on this information the application creates women profiles matching the risk they may be exposed to. The application is in tests in Bega Hospital. A set of profiles resulting from a knowledge base will show high risk situations, mainly in premature birth cases.

Accession Number: WOS:000445457500073

Conference Title: 6th IEEE International Conference on E-Health and Bioengineering (EHB)

Conference Date: JUN 22-24, 2017 Conference Location: Sinaia, ROMANIA

Conference Sponsors: IEEE, IEEE EMB Romania Chapter, Romanian Acad, Iasi Branch, Inst Comp Sci, Grigore T Popa Univ Med & Pharmacy, IEEE Romania Sect, Inst Informatica Teoretica, ESC Working Grp e Cardiol, Romanian Soc Med Bioengineering, Grigore T Popa Univ Med & Pharmacy, Fac Med Bioengineering, IEEE EMC Romania Chapter

ISSN: 2575-5137 elSSN: 2575-5145 ISBN: 978-1-5386-0358-1

Record 3 of 11

Title: ICT Supporting Treatment for High Risk Situations in Obstetrics

Author(s): Crisan-Vida, M (Crisan-Vida, Mihaela); Mihaltan, A (Mihaltan, Alina); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara); Moza, A (Moza, Andreea); Bernad, E (Bernad, Elena)

Book Group Author(s): IEEE

Source: 2017 IEEE INTERNATIONAL CONFERENCE ON E-HEALTH AND BIOENGINEERING CONFERENCE (EHB) Book Series: E-Health and Bioengineering Conference Pages: 301-304 Published: 2017

Abstract: The paper presents an ICT system that supports medical staff's activity, monitoring and assessing the treatment. Based on it, the MDs may decide the most effective treatments. The ICT system consists of a web-based application in the cloud, named Obstetrics-Gynecology Department Information System (OGD IS). The OGD IS described in this paper is a new version and includes the Statistical Component. Security is ensured, no sensitive data being available, only age and treatment. It provides the possibility to display advisory charts for the medical staff to select the best treatment for a certain case. The application supports mainly the detection of risk problems related to obstetrics-gynecology with high impact on difficult cases. The charts are updated in real time, based on currently filled in cases, each time when recording new data. The paper presents a study related to preterm birth where is very important to prevent the delivery as much as possible, to give the fetus the time to grow.

Accession Number: WOS:000445457500076

Conference Title: 6th IEEE International Conference on E-Health and Bioengineering (EHB)

Conference Date: JUN 22-24, 2017 Conference Location: Sinaia, ROMANIA

Conference Sponsors: IEEE, IEEE EMB Romania Chapter, Romanian Acad, Iasi Branch, Inst Comp Sci, Grigore T Popa Univ Med & Pharmacy, IEEE Romania Sect, Inst Informatica Teoretica, ESC Working Grp e Cardiol, Romanian Soc Med Bioengineering, Grigore T Popa Univ Med & Pharmacy, Fac Med Bioengineering, IEEE EMC Romania Chapter

Author Identifiers:

Author	ResearcherID Number	ORCID Number
Bernad, Elena		0000-0003-1084-2714

ISSN: 2575-5137 elSSN: 2575-5145 ISBN: 978-1-5386-0358-1

Record 4 of 11

Title: VR Medical Gamification for Training and Education

Author(s): Nicola, S (Nicola, Stelian); Virag, I (Virag, Ioan); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara)

Edited by: Hayn D; Schreier G

Source: HEALTH INFORMATICS MEETS EHEALTH: DIGITAL INSIGHT - INFORMATION-DRIVEN HEALTH & CARE Book Series: Studies in Health Technology and Informatics Volume: 236 Pages: 97-103 DOI: 10.3233/978-1-61499-759-7-97 Published: 2017

Abstract: The new virtual reality based medical applications is providing a better understanding of healthcare related subjects for both medical students and physicians. The work presented in this paper underlines gamification as a concept and uses VR as a new modality to study the human skeleton. The team proposes a mobile Android platform application based on Unity 5.4 editor and Google VR SDK. The results confirmed that the approach provides a more intuitive user experience during the learning process, concluding that the gamification of classical medical software provides an increased interactivity level for medical students during the study of the human skeleton.

Accession Number: WOS:000426828000013

PubMed ID: 28508784

Conference Title: 11th Annaul Conference on Health Informatics Meets eHealth (eHealth)

Conference Date: MAY 23-24, 2017

Conference Location: Schloss Schonbrunn, AUSTRIA

ISSN: 0926-9630 elSSN: 1879-8365

ISBN: 978-1-61499-759-7; 978-1-61499-758-0

Title: Communication between Hospital Departments Using Standards

Author(s): Crisan-Vida, M (Crisan-Vida, Mihaela); Jura, D (Jura, Diana); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara); Moza, A (Moza, Andreea); Bernad, E (Bernad, Elena)

Edited by: Anastasiu DM

Source: 13TH CONFERENCE OF THE ROMANIAN-GERMAN SOCIETY OF OBSTETRICS AND GYNECOLOGY Pages: 54-59 Published: 2017

Abstract: The paper presents a modern solution to manage data between hospital departments' information systems using standards to ensure interoperability. This results in less errors and an increase in disease and patient management better results, improved treatments followed by higher life expectancy. The applications in study are the Obstetrics-Gynaecology Department Information System and the Neonatology Department Information System as web applications communicating using the HL7 Clinical Document Architecture. The HL7 CDA documents are uploaded in the cloud and are accessed only by authorized parties. Cloud computing supports seamless care, flexibility and may reduce cost of the clinical process, mainly related to technology and errors management.

Accession Number: WOS:000417383400010

Conference Title: 13th Conference of the Romanian-German-Society-of-Obstetrics-and-Gynecology

Conference Date: SEP 14-16, 2017

Conference Location: Timisoara, ROMANIA

Conference Sponsors: Romanian German Soc Obstetr & Gynecol

ISBN: 978-88-95922-95-9

Record 6 of 11

Title: ICT Solution Supporting Collaboration between Clinicians

Author(s): Crisan-Vida, M (Crisan-Vida, Mihaela); Vladulescu, A (Vladulescu, Alexandra); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara); Moza, A (Moza, Andreea); Bernad, E (Bernad, Elena)

Edited by: Vladareanu S; Marginean C; Vladareanu R

Source: 5TH ROMANIAN CONGRESS OF THE ROMANIAN SOCIETY OF ULTRASOUND IN OBSTETRICS AND GYNECOLOGY Pages: 649-653 Published: 2017 Abstract: The paper presents a web-based application that supports communication related to medical imaging between physicians. If the physician needs a second opinion from another specialist regarding a case, he/she will upload the images in the cloud. The application uses cloud computing with the benefit of ubiquitous access and availability. Security is ensured, no sensitive data is transmitted, only images, no other patient data being sent. The physician will have the possibility to interact with the images through gestures using the Leap Motion controller, making it possible to rotate or zoom the received images to visualize the 3D image in more detail. The application has the possibility to send standardized information as HL7 Clinical Document Architecture to ensure the continuity of care. Obstetrics-gynecology 3D ultrasound images are imported in the application.

Using this application, the physicians have the possibility to receive more opinions this leading to a better patient care.

Accession Number: WOS:000406419700121

Conference Title: 5th Romanian Congress of the Romanian-Society-of-Ultrasound-in-Obstetrics-and-Gynecology

Conference Date: APR 20-22, 2017

Conference Location: Targu Mures, ROMANIA

Conference Sponsors: Romanian Soc Ultrasound Obstetr & Gynecol

ISBN: 978-88-95922-88-1

Record 7 of 11

Title: Leap motion supporting medical education

Author(s): Nicola, S (Nicola, Stelian); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara); Virag, I (Virag, Ioan); Crisan-Vida, M (Crisan-Vida, Mihaela)

Book Group Author(s): IEEE

Source: 2016 12TH IEEE INTERNATIONAL SYMPOSIUM ON ELECTRONICS AND TELECOMMUNICATIONS (ISETC'16) Pages: 153-156 Published: 2016 Abstract: The paper presents an application that enables medical students, health professionals, and individuals passionate about medicine to control human skeleton bones through gesture interaction using Leap Motion sensor. The application contains a main application and three applications derived from the main application with 3D bone images. The Leap Motion sensor is based on hands gesture recognition previously defined for a good control on the bones of the human skeleton. Tests made on items of the application show that it is easy to use and control.

Accession Number: WOS:000390717800035

Conference Title: 12th IEEE International Symposium on Electronics and Telecommunications (ISETC)

Conference Date: OCT 27-28, 2016

Conference Location: Timisoara, ROMANIA

Conference Sponsors: IEEE, Politechnica Univ Timisoara, Fac Elect & Telecomunicat, Assoc Elect Engineers Timisoara, Acad Stiinte Technice, Nokia,

Continental, Commun Test Syst

ISBN: 978-1-5090-3748-3

Record 8 of 11

Title: Gesture-Based Interaction in Medical Interfaces

Author(s): Virag, I (Virag, Ioan); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara); Crisan-Vida, M (Crisan-Vida, Mihaela)

Book Group Author(s): IEEE

Source: 2016 IEEE 11TH INTERNATIONAL SYMPOSIUM ON APPLIED COMPUTATIONAL INTELLIGENCE AND INFORMATICS (SACI) Pages: 519-523 Published:

Abstract: The latest generation of medical visualizations systems that provide gesture based interaction usually rely on closed source software modules. This paper presents a novel approach since the interaction with the rendered 3D images is done via a web browser. The entire system is based on open source software components and this way eliminates the requirement to have a specific operating system preinstalled. Our team used a Leap Motion controller that allows the rotation, panning, scaling and selection of individual slices of a reconstructed 3D model based on a prior CT (Computed Tomography) or MRI (Magnetic Resonance Imaging) scan of a patient. The results showed that is feasible to build such a system and that the interaction with the model can be done in real-time. It was concluded that this web oriented architecture could provide a sustainable alternative for interacting with medical images.

Accession Number: WOS:000387119900093

Conference Title: 11th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI)

Conference Date: MAY 12-14, 2016 Conference Location: Timisoara, ROMANIA

Conference Sponsors: IEEE ISBN: 978-1-5090-2380-6

Record 9 of 11

Title: User Interface Design in Medical Distributed Web Applications

Author(s): Serban, A (Serban, Alexandru); Crisan-Vida, M (Crisan-Vida, Mihaela); Mada, L (Mada, Leonard); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara)

Edited by: Schreier G; Ammenwerth E; Horbst A; Hayn D

Source: HEALTH INFORMATICS MEETS EHEALTH Book Series: Studies in Health Technology and Informatics Volume: 223 Pages: 223-229 DOI: 10.3233/978-1-61499-645-3-223 Published: 2016

Abstract: User interfaces are important to facilitate easy learning and operating with an IT application especially in the medical world. An easy to use interface has to be simple and to customize the user needs and mode of operation. The technology in the background is an important tool to accomplish this. The present work aims to creating a web interface using specific technology (HTML table design combined with CSS3) to provide an optimized responsive interface for a complex web application. In the first phase, the current icMED web medical application layout is analyzed, and its structure is designed using specific tools, on source files. In the second phase, a new graphic adaptable interface to different mobile terminals is proposed, (using HTML table design (TD) and CSS3 method) that uses no source files, just lines of code for layout design, improving the interaction in terms of speed and simplicity. For a complex medical software application a new prototype layout was designed and developed using HTML tables. The method uses a CSS code with only CSS classes applied to one or multiple HTML table elements, instead of CSS styles that can be applied to just one DIV tag at once. The technique has the advantage of a simplified CSS code, and a better adaptability to different media resolutions compared to DIV-CSS style method. The presented work is a proof that adaptive web interfaces can be developed just using and combining different types of design methods and technologies, using HTML table design, resulting in a simpler to learn and use interface, suitable for healthcare services.

Accession Number: WOS:000385791400030

PubMed ID: 27139407

Conference Title: 10th eHealth Conference on Predictive Modeling in Healthcare - From Prediction to Prevention

Conference Date: MAY 24-25, 2016 Conference Location: Vienna, AUSTRIA

ISSN: 0926-9630 elSSN: 1879-8365

ISBN: 978-1-61499-645-3; 978-1-61499-644-6

Record 10 of 11

Title: Integrated System for Monitoring and Prevention in Obstetrics-Gynaecology

Author(s): Robu, A (Robu, Andreea); Gauca, B (Gauca, Bianca); Crisan-Vida, M (Crisan-Vida, Mihaela); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara)

Edited by: Hofdijk J; Seroussi B; Lovis C; Ehrler F; Sieverink F; Ugon A; HercigonjaSzekeres M

Source: TRANSFORMING HEALTHCARE WITH THE INTERNET OF THINGS Book Series: Studies in Health Technology and Informatics Volume: 221 Pages: 8-12 DOI: 10.3233/978-1-61499-633-0-8 Published: 2016

Abstract: A better monitoring of pregnant women, mainly during the third trimester of pregnancy and an easy communication between physician and patients are very important for the prevention and good health of baby and mother. The paper presents an integrated system as support for the Obstetrics -Gynaecology domain consisting in two modules: a mobile application, ObGynCare, dedicated to the pregnant women and a new component of the Obstetrics-Gynaecology Department Information System dedicated to the physicians for a better monitoring of the pregnant women. The mobile application informs the pregnant women about their status, permits them to introduce glycaemia and weight values and has as option pulse and blood pressure acquisition from a smart sensor and provides results in a graphic format. It also provides support for easy patient-doctor communication related to any health problems. ObGyn Care offers nutrition recommendations and gives the pregnant women the possibility to enter a social space of common interests using social networks (Facebook) to exchange useful and practical information. Data collected from patients and from sensor are stored on the cloud and the physician may access the information and analyse it. The extended module of the Obstetrics-Gynaecology Department Information System already developed supports the physicians to visualize weekly, monthly, or on a trimester, the patient data and to discuss with her through the chat module. The mobile application is in test by pregnant women and medical personnel.

Accession Number: WOS:000385791000002

PubMed ID: 27071866

Conference Title: Special Topic Conference (STC) of the European-Federation-for-Medical-Informatics (EFMI) on Transforming Healthcare with the Internet of

Things

Conference Date: APR 17-19, 2016 Conference Location: Paris, FRANCE

Conference Sponsors: European Federat Med Informat

ISSN: 0926-9630

ISBN: 978-1-61499-633-0; 978-1-61499-632-3

Record 11 of 11

Title: Gesture Interaction Browser-Based 3D Molecular Viewer

Author(s): Virag, I (Virag, Ioan); Stoicu-Tivadar, L (Stoicu-Tivadar, Lacramioara); Crisan-Vida, M (Crisan-Vida, Mihaela)

Edited by: Mantas J; Hasman A; Gallos P; Kolokathi A; Househ MS

Source: UNIFYING THE APPLICATIONS AND FOUNDATIONS OF BIOMEDICAL AND HEALTH INFORMATICS Book Series: Studies in Health Technology and Informatics Volume: 226 Pages: 17-20 DOI: 10.3233/978-1-61499-664-4-17 Published: 2016

Abstract: The paper presents an open source system that allows the user to interact with a 3D molecular viewer using associated hand gestures for rotating, scaling and panning the rendered model. The novelty of this approach is that the entire application is browser-based and doesn't require installation of third party plug-ins or additional software components in order to visualize the supported chemical file formats. This kind of solution is suitable for instruction of users in less IT oriented environments, like medicine or chemistry. For rendering various molecular geometries our team used GLmol (a molecular viewer written in JavaScript). The interaction with the 3D models is made with Leap Motion controller that allows real-time tracking of the user's hand gestures. The first results confirmed that the resulting application leads to a better way of understanding various types of translational bioinformatics related problems in both biomedical research and education.

Accession Number: WOS:000385446600003

PubMed ID: 27350455

Conference Title: 14th Annual International Conference on Informatics, Management, and Technology in Healthcare (ICIMTH)

Conference Date: JUL 01-03, 2016 Conference Location: Athens, GREECE

ISSN: 0926-9630

ISBN: 978-1-61499-664-4; 978-1-61499-663-7

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