#### Prof. Dr. Vedat COSKUN

#### Computer Scientist and Engineer & Academician & Researcher & Author & Consultant

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Prof. Vedat Coskun is a Computer Scientist, Computer Engineer, Academician, Researcher, Author, and Consultant. He is the founder and manager of www.NFCLab.org, the leading research lab on Near Field Communication (NFC), Smartphones, Smartcards, SIM Cards, Credit Cards, Payment Cards, Prepaid Cards technologies worldwide.

He believes in the globalization of science, technology, and education. He has taught at many universities, such as University of Thessaly (Greece), Malardalen University (Sweden), Inholland University (Netherlands), Lublin University of Technology (Poland), and University of Dubrovnik (Croatia).

He specializes in Blockchain Technologies, Cyber Security, Cryptography, Java technology, Near Field Communication (NFC), Mobile Technologies, Electronic and Mobile Payment ecosystems. He acts as both advisor and evaluator in national and international funded research-based projects.

He has a vast number of international publications including books, patents, journal papers and conference presentations. He co-authored Near Field Communication: From Theory to Practice (Wiley, 2012); and Professional NFC Application Development for Android (Wrox, 2013). He co-authored The Survey on Near Field Communication journal paper. He believes in the importance of combining academic knowledge and education, as well as R & D study and industrial projects for providing higher national and international outcomes.

#### Key Achievements

- Founder and Manager of NFCLab@Istanbul Research Lab
- Author of 2 English and 2 Turkish books & editor of 1 Turkish book
- 20+ funded research projects
- 2 accepted & 4 pending patents
- 28 international & 5 national journal articles
- 27 international & 10 national conference presentations
- Excellence in Teaching Award, ISIK University, 2010
- Google scholar h-index = 20, citation = 2,200+
- Industry focused Consultancy and Teaching
- Academic visits to 30 countries
- Teaching experience in 10+ universities
- Organized and lead 2 academic visits to Europe with 10 students each
- Evaluated 200 national and 10 international research project proposals
- Associate Editor-in-Chief, Advances in Cyber-Physical Journal

## Books

Near Field communication Pron Theory to Practice Interface   from 0   boy Official WILEY	Near Field Communication (NFC): From Theory to Practice Vedat Coskun, Kerem Ok, Busra Ozdenizci Wiley publishing ISBN: 978-1-119-97109-2, 2012 <u>Publisher</u> <u>Amazon</u>
Professional NFC Application Development for Android	NFC Application Development for Android Vedat Coskun, Kerem Ok, Busra Ozdenizci Wrox publishing ISBN-13: 978-1118380093, 2013 <u>Publisher</u> <u>Amazon</u>
<text></text>	Here is Java (in TURKISH) Vedat Coskun, Busra Ozdenizci ISBN: 978-605-9594-02-8 <u>Publisher</u> <u>Amazon</u>
Işletim Sistemleri Vereteret Martenet	<b>Operating Systems (in Turkish)</b> Vedat Coskun (editor) ISBN: 978-605-9594-72-1 <u>Publisher</u> <u>Amazon</u>
PASCAL	<b>Pascal (in Turkish)</b> Vedat Coskun

### **Google Scholar**



# Prof. Dr. Vedat COSKUN 🖌

NFCLab@Istanbul Verified email at atlas.edu.tr - <u>Homepage</u>

BlockChain Technology Near Field Communication Mobile Payment Digital Signature Access Control

260

	All	Since 2019
Citations	2349	800
h-index	21	10
i10-index	26	11



## Education

Degree received	Institute	Year
B.S. in Operational Research	Turkish Naval Academy, Istanbul, Turkey	1984
M.Sc. in Computer Science Thesis: A Software Prototype for a Command, Control, Communication, and Intelligence (C3I) Workstation	Naval Postgraduate School, California, USA	1990
Ph.D. in Computer Science and Engineering Dissertation: Design of a Cryptographic Model to be Used in Hierarchical Structures	Yildiz Technical University, Istanbul, Turkey	1998

# Academic Positions

Institution	Department	Title	Dates	
Istanbul Atlas University	Software Engineering	Prof. Dr.	24.08.2022 - today	
Istanbul Beykent University	Computer Engineering	Prof. Dr.	15.08.2019 - 24.08.2022	
	Software Engineering	Prof. Dr.	01.01.2018 - 14.08.2019	
ISIK University	Information Technologies	Prof. Dr.	01.11.2015 - 31.07.2017	
		Assoc. Prof.	08.07.2010 - 31.10.2015	
		Assist. Prof.	01.10.2005 - 07.07.2010	
Turkish Navy	Turkish Naval Academy	Assist. Prof.	01.09.1984 - 30.09.2005	
	Naval Warships	Navy Captain		

# Administrative Positions

Institution	Department	Title	Dates
Istanbul Atlas University	Technology Transfer Office Board of Directors	Board Member	29.08.2023 - today
Istanbul Atlas University	Faculty of Engineering Board of Directors	Board Member	
ISIK University Department of Technologies		Chair	01.07.2006 - 30.06.2017
Turkish Naval Academy	Postgraduate Institute	Vice Director	01.09.2001 - 30.08.2005
	Department of Computer Engineering	Chair	01.01.2003 - 30.08.2005

## Projects

I have performed about 20+ funded projects. Information about some of them are as follows.

I believe in the importance of academia & industry relationship in Information Technology, and take roles such as project development, researcher, and consultant in industrial R&D projects for national and international companies in this manner.

Funding Institute	Partner Institute	Project Name	
	Turkcell Technology	Design and Development of a Secure Communication Protocol between a Smartcard and a Service Provider through Cellular Network (1505-5130053)	
		User Behavior Model of the Smartphone Mobile Service Users (0955.STZ.2015 & 112D090)	
TUBITAK Turkish Research Support Organization		Unleash the Power of SIM Card (UPSC) (A CELTIC Project) (Best CELTIC Project award)	
		Secure Key Management System on the SIM Card (SIM-GAYS) (1505- 5180027)	
		Design and Development of a New Generation Authentication Method, Based on Open-ID Connect (1505-5190045)	
		Blockchain Based Three Factor Biometric Authentication System (BC- 3FA) (1505-5200080)	
		Blockchain Based Vehicle Life Cycle Management System (BC - 4Track) (1505-5220118)	
	Triodor	A Method and Application for Business Process Engineering	
		A Dairy Farm Analysis and Learning System	
Turkish Ministry of Science	Koc system	Secure Element on the Cloud	
and Technology	Provus	NFC Loyal	
Turkish Interbank (BK	M)	NFC Ecosystem, Usability Analysis and Secure Element	
ISIK University		Smart University Campus	
		Enabling Coexistence of Multiple Applications on a Secure Element in NFC Enabled Mobile Devices	
		Increasing Cumulative Connected Coverage in Wireless Sensor Networks by Relocating Sensor Nodes	

## Teaching

I strongly believe in the global nature of science and education. Throughout my career, I have had the opportunity to teach a diverse range of courses encompassing various subjects, including Mobile Technologies, Database Management Systems, Computer Networks, Computer Programming, Data Structures and Algorithms, and Security.

In addition to my regular teaching responsibilities, I have also had the privilege of sharing my knowledge and expertise as a visiting professor in more than 10 universities. These experiences have allowed me to engage with students from different backgrounds and cultures, fostering a deeper understanding and appreciation for the international aspects of academia.











# **Courses Taught in Universities**

01	OOP in Python
02	Graphical Programming in Python and Java
03	Java Programming courses in Intro, Mid, Adv. levels
04	Mobile Java Programming
05	Internet and Web Programming
06	Server-Side Programming
07	DBMS courses in Intro, Mid, Adv. levels
08	C Programming
09	OOP in C++
10	Data Structures and Algorithms in Pascal, C, and Java
11	Mobile Computing (Graduate)
12	NFC Technology (Graduate)
13	Computer Organization
14	Agile (Scrum) SDLC
15	Software Architecture and Design
16	Operating Systems
17	Computer Networks
18	Information Security, Network Security (Graduate)
19	Blockchain Architecture and Development
20	Access Control Systems
21	E-Commerce

### **Curriculum Design**

During my tenure as department chair, I took proactive measures to ensure the continuous improvement of the curricula for the B.S. in Information Technologies, B.S. in Management Information Systems, B.S. in Computer Engineering, and M.Sc. in Information Technologies programs. The updates were guided by several key parameters, which I would like to outline:

- Adherence to International Standards: I prioritized aligning the curricula with the highest international standards in the respective fields. This ensured that our programs were in line with global best practices and prepared our students for success on an international level.
- Prerequisite Course Connections: I emphasized establishing strong connections among prerequisite topics across courses. By carefully designing the curriculum, we ensured that students developed a solid foundation and could progress smoothly through the program.
- Appropriate Course Content: Each course was meticulously reviewed to ensure that it contained the appropriate content—nothing less and nothing more. This approach ensured that students acquired the necessary knowledge and skills without unnecessary overload.
- Practical Application and Documentation: It was essential that each course incorporated practical components such as design, application, and documentation, as required by industry standards. This enabled students to apply their theoretical knowledge in real-world scenarios.
- Alignment with Industry Needs: The courses were designed to address the current needs and demands of the industry. By staying up to date with industry trends, we ensured that our graduates were equipped with relevant skills and knowledge sought after by employers.
- Elective Course Options: To provide students with flexibility and the opportunity to specialize, I ensured that a sufficient number of elective courses were offered. This allowed students to tailor their education to their specific interests and career goals.
- Contemporary Teaching Material and Methodology: I placed great emphasis on incorporating contemporary teaching materials and employing effective teaching methodologies. This ensured that students received a modern and engaging learning experience.
- Compliance with Accreditation Requirements: I ensured that the curricula met the common accreditation requirements established by relevant professional bodies or organizations. This was crucial to maintain the quality and recognition of our programs.

### **International Journal Articles**

(J29) Busra Ozdenizci Kose, Vedat Coskun, Arslan Coskun, Senol Yaya; A Blockchain-Enhanced Self-Sovereign Identity Platform for Corporate Resource Security; Advances in Cyber-Physical Systems (ACPS), DOI: https://doi.org/10.23939/acps2023.02.111, Nov 1, 2023.

(J28) Busra Ozdenizci Kose, Alp Sardag, Vedat Coskun, H. Ali Mantar; Enhancing SIM Card Technology: Developing an Advanced Operating System; Advances in Cyber-Physical Systems (ACPS), DOI: https://doi.org/10.23939/acps2023.01.035, May 1, 2023.

(J27) Busra Ozdenizci Kose, Vedat Coskun, H. Ali Mantar, Senol Yaya; WifiZoneCloud: A Cloud-Based Wi-Fi Hotspot Platform; Advances in Cyber-Physical Systems (ACPS), 7(2), 108-114., DOI:10.23939/acps2022.02.108, 9 July 2022.

(J26) Busra Ozdenizci Kose, Vedat Coskun, Hakan Uluoz; A Secure Design on Mifare Classic Cards for Ensuring Contactless Payment and Control Services; Advances in Cyber-Physical Systems (ACPS), 7(1), 22-28., DOI: 10.1111/j.1365-2777X, Dec 1, 2022.

(J25) Vedat Coskun, Busra Ozdenizci Kose, Mohammed Alsadi, Haci Ali Mantar, Aybuke Cakici; A Scheduling System for Enhancing and Monitoring Work Performance of Field Employees;

Beykent University Journal of Science and Engineering, 14(1), 6-14., Doi: 10.20854/bujse.985510, Oct 22, 2021.

(J24) Busra Ozdenizci Kose, Onur Buk, Haci Ali Mantar, Vedat Coskun, Utku Erdemir; Protecting Mobile Service User Identity by Adding Additional Security Layer; European Journal of Science and Technology, (23), 22-30, https://doi.org/10.31590/ejosat.833433, Apr 30, 2021.

(J23) Busra Ozdenizci Kose, C. Cevikbas, Haci Ali Mantar, Vedat Coskun; Development of a SIM Card based Key Management System; European Journal of Science and Technology, pp.70-77., Doi: 10.31590/ejosat.818711, Nov 30, 2020.

(J22) Vedat Coskun, M. Andac Ayvaz, Mohammed Alsadi, Busra Ozdenizci; Smartpay Ecosystem Design Model; International Journal of Management and Applied Science, ISSN: 2394-7926, Volume 3, Issue 10, Oct 2017.

(J21) Kerem Ok, Cem Cevikbas, Vedat Coskun, Mohammed Alsadi, Busra Ozdenizci; Security Analysis of SIMSec Protocol; WASET International Journal of Computer, Electrical, Control and Information Engineering Vol:10, No:2, pp. 329–332, 2016.

(J20) Mohammed Alsadi, H. Ali Mantar, Vedat Coskun, Kerem Ok, Busra Ozdenizci; Challenges and Risks of Developing a Payment Facilitator Model, Journal of Information Security Research, ISSN: 0976-4143, Volume 7, Issue 3, pp. 109 – 117, September 2016.

(J19) Vedat Coskun, Busra Ozdenizci, Kerem Ok; SIMSec: A Key Exchange Protocol Between SIM Card and Service Provider; Wireless Personal Communications, ISSN: 0929-6212, Volume 89, Issue 4, pp. 1371-1390, August 2016.

(J18) Kerem Ok, C. Cevikbas, Mohammed Alsadi, Busra Ozdenizci, Vedat Coskun; Implementation of a Key Exchange Protocol for Secure Communication between SIM Card and Service Provider, International Journal of Advanced Computational Engineering and Networking, ISSN: 2320-2106, Volume-4, Issue-2, pp. 79-81, February 2016.

(J17) Busra Ozdenizci, Kerem Ok, Vedat Coskun; A Tokenization-Based Communication Architecture for HCE-Enabled NFC Services, Mobile Information Systems, ISSN: 1574-017X, Volume 2016, Article ID 5046284, Nov 30, 2016.

(J16) Vedat Coskun, Busra Ozdenizci, Kerem Ok; The Survey on Near Field Communication; SENSORS, ISSN: 1424-8220, Volume 15, Issue 6, pp. 13348-13405, DOI: 10.3390/s150613348, PMID: 26057043, June 5, 2015. (Q1)

(J15) Busra Ozdenizci, Vedat Coskun, Kerem Ok; NFC Internal: An Indoor Navigation System; SENSORS, ISSN: 1424-8220, Volume 15, Issue 3, pp. 7571-7595, May 27, 2015. (Q1)

(J14) Kerem Ok, Vedat Coskun, Cem Cevikbas; Challenges and Risks for a Secure Communication between a Smartcard and a Service Provider through Cellular Network; International Journal of Advances in Computer Networks and its Security, 4 (4), pp. 26-30, August 26, 2014.

(J13) Busra Ozdenizci, Kerem Ok, Mohammed Alsadi, Vedat Coskun, F. Soylemezgiller; Development of NFC Enabled Loyalty Application: Technical and Business Opportunities; Technical and Business Opportunities; Academic Journal of Science (AJS), 3 (1), pp. 141-149, 28-31 October 2014.

(J12) Vedat Coskun, F. Soylemezgiller, Busra Ozdenizci, Kerem Ok; Development and Performance Analysis of Multifunctional City Smart Card System; WASET International Journal of Computer, Control, Quantum and Information Engineering Vol:8 No:2, 27-28 February 2014.

(J11) Vedat Coskun, Busra Ozdenizci, Kerem Ok; A Survey on Near Field Communication (NFC) Technology; Wireless Personal Communications, ISSN: 0929-6212, Volume 71, Issue 3, pp. 2259-2294, DOI: 10.1007/s11277-012-0935-5, August 2013.

(J10) Busra Ozdenizci, Mohammed Alsadi, Kerem Ok, Vedat Coskun; Classification of NFC Applications in Diverse Service Domains; International Journal of Computer and Communication Engineering (IJCCE), Volume 2, No 5, pp. 614-620, September 2013.

(J09) Busra Ozdenizci, Kerem Ok, Vedat Coskun; NFC Loyal for Enhancing Loyalty Services Through Near Field Communication; Wireless Personal Communications, ISSN: 0929-6212, Volume 68, Issue 4, pp. 1923-1942, DOI: 10.1007/s11277-012-0556-z, February 2013.

(J08) Kerem Ok, Vedat Coskun, Busra Ozdenizci, Mehmet Aydin; A Role-Based Service Level NFC Ecosystem Model; Wireless Personal Communications, ISSN: 0929-6212, Volume 68, Issue 3, pp. 811-841, DOI: 10.1007/s11277-011-0484-3, February 2013.

(J07) Vedat Coskun, Relocating Sensor Nodes to Maximize Cumulative Connected Coverage in Wireless Sensor Networks; SENSORS, ISSN: 1424-8220, Volume 8, No. 4, 1424-8220, 2008. (Q1)

(J06) E. Cayirci, H. Tezcan, Y. Dogan, Vedat Coskun; Wireless Sensor Networks for Underwater Surveillance Systems; Ad Hoc Networks (Elsevier), ISSN: 1570-8705, Volume: 4, Issue: 4, pp. 431-446, (2006). (Q1)

(J05) Ayhan Erdogan, Vedat Coskun, Adnan Kavak; The Sectoral Sweeper Scheme for Wireless Sensor Networks: Adaptive Antenna Array Based Sensor Node Management and Location Estimation; Wireless Personal Communications (Elsevier), ISSN: 0929-6212, Volume 39, Number:4, 415-433 (2006).

(J04) Vedat Coskun, Erdal Cayirci, Albert Levi, Serdar Sancak; Quarantine Region Scheme to Mitigate Spam Attacks in Wireless Sensor Networks, IEEE Transactions on Mobile Computing, ISSN: 1536-1233, Volume 5, Number: 8, 1074-1086 (2006). (Q1)

(J03) Erdal Cayirci, Vedat Coskun, Caghan Cimen; Querying Sensor Networks by Using Dynamic Task Sets; Computer Networks (Elsevier), ISSN: 1389-1286, Volume 50, Issue 7, 938-952 (2006). (Q1)

(J02) Ergin Altintas, Elif Karsligil, Vedat Coskun; The Effect of Windowing in Word Sense Disambiguation, International Symposium on Computer and Information Sciences (ISCIS XV), Istanbul-Turkey, October 26-28, 2005; also published in Lecture Notes in Computer Science (Springer-Verlag), LNCS 3733, ISSN: 0302-9743, Pages: 626-635, October 2005.

(J01) Luqi, Z. Guan, Valdis Berzins, Lynn Zhang, David Floodeen, Vedat Coskun, J. Puett, M. Brown; Requirements-document-based prototyping of CARA software; STTT - International Journal on Software Tools for Technology Transfer (Springer), ISSN: 1433-2779 (Print) 1433-2787 (Online), Volume: 5, Issue: 4, pp. 370 – 390, (2004).

### **International Conference Proceedings & Presentations**

(C34) Vedat Coskun, Mohammed Alsadi, Busra Ozdenizci Kose, H. Ali Mantar, Mikail Abdullah Oral; BC-4Track: A Blockchain based System for Vehicle Tracking Management; IEEE International Symposium on Innovative Approaches in Smart Technologies (ISAS 2023), 1(1), 38-46, 23 November 2023.

(C33) Vedat Coskun, Busra Ozdenizci Kose, Mustafa Ozan Capa; TokenX: A Digital Sales Platform for B2C Payment and Finance Solutions; IEEE International Symposium on Innovative Approaches in Smart Technologies (ISAS 2023), 1(1), 38-46, 23 November 2023.

(C32) Busra Ozdenizci Kose, Vedat Coskun, Hakan Uluoz; A Generic Remote Key Loading Method for Enhancing Payment Services; IEEE International Symposium on Innovative Approaches in Smart Technologies (ISAS 2023), 1(1), 38-46, 23 November 2023.

(C31) Busra Ozdenizci Kose, Mufit Suer, Senol Yaya, Vedat Coskun, H. Ali Mantar; CloudSpot: Enhancing Wi-Fi Hotspot Management with Cloud-Driven Innovations; IEEE International Symposium on Innovative Approaches in Smart Technologies (ISAS 2023), 1(1), 38-46, 23 November 2023.

(C30) Busra Ozdenizci Kose, Mufit Suer, Senol Yaya, Vedat Coskun, H. Ali Mantar; An Innovative Risk Score Based Corporate Access Control Management System; IEEE International Symposium on Innovative Approaches in Smart Technologies (ISAS 2023), 1(1), 38-46, 23 November 2023.

**(C29)** Busra Ozdenizci Kose, **Vedat Coskun**, Syed Saad SAIF, Alessandro GIUSEPPI; Circular AI: Enhancing Recycling and Waste Management with Advanced Artificial Intelligence; V. Baskent International Conference on Multidisciplinary Studies, 1(1), 38-46, 21 December 2023.

(C28) Busra Ozdenizci Kose, Vedat Coskun, Halil Dikici, Sedat Marangoz; Evaluating the Performance of a Secure and Real-Time Communication Protocol for IoT Devices; V. Baskent International Conference on Multidisciplinary Studies, 1(1), 38-46, 21 December 2023.

(C27) Busra Ozdenizci Kose, Mufit Suer, Senol Yaya, Vedat Coskun, H. Ali Mantar; Redesign of Data Centers for Energy Efficiency: A Cold Aisle Containment Implementation; 3. Baskent International Conference on Multidisciplinary Studies, 1(1), 38-46, 21 December 2023.

(C26) Busra Ozdenizci Kose, Onur Buk, Haci Ali Mantar, Vedat Coskun; TrustedID: An Identity Management System based on OpenID Connect Protocol; 4th International Symposium on Multidisciplinary Studies and Innovative Technologies (ISMSIT2020), 22-24 Ekim 2020, Türkiye. IEEE.

(C25) Busra Ozdenizci Kose, Rahmi Cem Cevikbas, Haci Ali Mantar, Onur Buk, Vedat Coskun; Design of a Secure Key Management System for SIM Cards: SIM-GAYS. 5th International Conference on Computer Science and Engineering (UBMK), Doi: 10.1109/UBMK50275.2020.9219504, Sep 9, 2011.

(C24) Busra Ozdenizci Kose, Semi Enis Morkoyun, Mohammed Alsadi, Haci Ali Mantar, Vedat Coskun; A SIM Card Based Key Management System, Proceedings of International Conference on Advances in Business Management and Information Technology (ICABMIT'19), pp 1-5, Milan, Italy, 29-30 October 2019.

**(C23) Vedat Coskun**, M. Andac Ayvaz, Mohammed Alsadi, Busra Ozdenizci; Smartpay Ecosystem Design Model; Proceedings of ISERD International Conference, Zurich, Switzerland, pp. 24 – 30, 16 – 17 August 2017.

(C22) Kerem Ok, C. Cevikbas, Mohammed Alsadi, Busra Ozdenizci, Vedat Coskun; Implementation of a Key Exchange Protocol for Secure Communication between SIM Card and Service Provider, Academics World 14th International Conference on Management and Information Technology (ICMIT), Bangkok, Thailand, December 2015. (C21) Busra Ozdenizci, Vedat Coskun, S. Gulsecen, Kerem Ok; A Cloud Based Framework for HCE Enabled NFC Services; Proceedings of the 64th IIER International Conference, Barcelona, Spain, pp. 11-14, 4 March 2016.

(C20) Kerem Ok, Cem Cevikbas, Mohammed Alsadi, Vedat Coskun, Busra Ozdenizci; Discussion of a Key Exchange Protocol Between Un-keyed SIM Card and Service Provider; Proceedings of the 60th IIER International Conference, Malacca, Malaysia, pp. 20-22, 15 February 2016.

(C19) Kerem Ok, Vedat Coskun, Cem Cevikbas, Busra Ozdenizci; Design of a Key Exchange Protocol between SIM Card and Service Provider, Proceedings of 23<sup>rd</sup> Telecommunications Forum (TELFOR 2015), Belgrade, Serbia, pp. 281-284, 24-26 November 2015.

(C18) Busra Ozdenizci, Vedat Coskun, Kerem Ok, Turgay Karlidere; Significance of Tokenization in Promoting Cloud Based Secure Elements, Proceedings of the International Conference on Big Data, IoT, and Cloud Computing (BIC 2015), Osaka, Japan, pp. 29-40, 23-25 August 2015.

(C17) Busra Ozdenizci, Vedat Coskun, Kerem Ok, Turgay Karlidere; A Secure Communication Model for HCE based NFC Services, 3rd International Conference on Creative Technology (CRETECH 2015), Bangkok, Thailand, 19-21 August 2015.

(C16) Kerem Ok, Vedat Coskun, Cem Cevikbas; Challenges and Risks for a Secure Communication between a Smartcard and a Service Provider through Cellular Network; presented: International Conference on Advances in Computer and Electronics Technology (ACET 2014), Hong Kong, China, pp. 74-78, DOI:10.15224/978-1-63248-024-8-16.

(C15) Vedat Coskun, Busra Ozdenizci, Kerem Ok, Mohammed Alsadi; NFC Loyal System on the Cloud, Proceedings of the 7th International Conference on Application of Information and Communication Technologies (AICT), pp. 1-5, Baku, Azerbaijan, 23-25 October 2013.

(C14) Vedat Coskun, Busra Ozdenizci, Kerem Ok, Mohammed Alsadi, F. Soylemezgiller; Design and Development of NFC Enabled Loyalty System; Proceedings of the 6th International Conference of Advanced Computer Systems and Networks: Design and Application, Lviv, Ukraine, pp. 42-45, 16-18 September 2013.

(C13) Vedat Coskun, Busra Ozdenizci, F. Soylemezgiller, Murat Kalender; Multifunctional City Smart Card based on M/Chip Advance Technology; Proceedings of the Conference on Web Based Management, Shanghai, China, pp. 469-472, 21-23 September 2012.

(C12) Busra Ozdenizci, Kerem Ok, Vedat Coskun, Mehmet Aydin; Development of an Indoor System using NFC Technology; Proceedings of the 4th International Conference on Information and Computing Science, Phuket Island, Thailand, pp. 11 - 14, 25-27 April 2011.

(C11) Kerem Ok, MNA, Vedat Coskun, Busra Ozdenizci; Exploring Underlying Values of NFC Applications; Proceedings of the 3rd International Conference on Information and Financial Engineering (IPEDR) vol.12, IACSIT Press, Singapore, pp. 290–294, 2011.

(C10) Busra Ozdenizci, Mehmet Aydin, Vedat Coskun, Kerem Ok; Design Science in NFC Research, Proceedings of the IEEE International Conference for Internet Technology and Secured Transactions, pp. 158-163; London, 8-11 November 2010.

(C09) Busra Ozdenizci, Vedat Coskun, Mehmet Aydin, Kerem Ok; NFC Loyal: A Beneficial Model to Promote Loyalty on Smart Cards of Mobile Devices; Proceedings of the IEEE International Conference for Internet Technology and Secured Transactions, pp. 134-139, London, 8-11 November 2010.

(C08) Kerem Ok, Mehmet Aydin, Vedat Coskun, Busra Ozdenizci; Current Benefits and Future Directions of NFC Services; Proceedings of the IEEE International Conference on Education and Management Technology (ICEMT 2010), pp. 334-338, Cairo, Egypt, 2-4 November 2010.

(C07) Mehmet Aydin, Busra Ozdenizci, Vedat Coskun, Kerem Ok; NFC Research Framework: A Literature Review and Future Research Directions; Proceedings of the 14th IBIMA Conference on Global Business Transformation through Innovation and Knowledge Management, Istanbul, Turkey, 23-24 June 2010.

(C06) Vedat Coskun, Kerem Ok, Mehmet Aydin; Usability of Mobile Voting with NFC Technology; Proceedings of the IASTED International Conference, Software Engineering (SE 2010), Innsbruck, Austria, 16-18 February 2010.

(C05) Ergin Altintas, Elif Karsligil, Vedat Coskun; A New Semantic Similarity Measure Evaluated in Word Sense Disambiguation, 15th Nordic Conference of Computational Linguistics (NODALIDA 2005), ISBN: 952-458-771-8, ISSN: 1796-1114, pp. 8 – 11, Joensuu, Finland, 20-21 May 2005.

(C04) Serdar Sancak, Erdal Cayirci, Vedat Coskun, Albert Levi; Sensor Wars: Detecting and Defending Against Spam Attacks in Wireless Sensor Networks; International Communications Conference (ICC-2004), Paris, 20-24 June 2004.

(C03) Hakan Tezcan, Erdal Cayirci, Vedat Coskun; A distributed scheme for 3D space coverage in tactical underwater sensor networks, Military Communications Conference (Milcom-2004), Monterey - California, 31 October – 3 November 2004.

(C02) Ayhan Erdogan, Erdal Cayirci, Vedat Coskun; Sectoral Sweepers for Sensor Node Management and Location Estimation in Adhoc Sensor Networks, Military Communications Conference (Milcom-2003), Boston, 13-16 October 2003.

(C01) Caghan Cimen, Erdal Cayirci, Vedat Coskun; Querying Sensor Fields by Using Quadtree Based Dynamic Clusters and Task Sets, Proceedings of Military Communications Conference (Milcom-2003), pp. 561 – 566, Boston, 13-16 October 2003.

#### **National Patents**

(**P01**) (TPE-Turkish) A System and Method for a Secure Communication System (Yüksek Güvenlikli İletişim İçin Bir Sistem ve Yöntem), Inventors: **Vedat Coskun**, Kerem Ok, Busra Ozdenizci, R. Cem Cevikbas; TPE Registration Number: 2016/01088, Registration Date: 2019-01-21.

(**P02**) (TPE - Turkish) Managing Secure Element on the Cloud (Gizli Bilgilerin Bulut Mimarisinde Yönetilmesi), Inventors: **Vedat Coskun**, Turgay Karlıdere, Busra Ozdenizci, Kerem Ok; TPE Registration Number: 2015/14888 Registration Date: 2020-02-21.

(P03) (TPE proposal - Turkish) A System and Method for Highly Security Key Management (Yüksek Güvenlikli Anahtar Yönetimi İçin Bir Sistem ve Yöntem), Inventors: Turkcell Technology, Inventors: Rahmi Cem Cevikbas, Hacı Ali Mantar, Vedat Coskun, Semi Enis Morkoyun, Busra Ozdenizci; TPE Registration Number: 2019/16527, Registration Date: (under review).

(P04) (TPE proposal - Turkish) Advanced User Recognition System in Wireless Network Access (Kablosuz Ağ Erişiminde İleri Zamanlı Kullanıcı Tanıma Sistemi), Inventors: Senol Yaya, Busra Ozdenizci Kose, H. Ali Mantar, Vedat Coskun; TPE Registration Number: 2022/013676, Registration Date: (under review).

(P05) (TPE proposal - Turkish) Policy-Based Network Traffic Control System and Method in the Use of Corporate VPN by Remote Users (Uzaktan Çalışan Kullanıcıların Kuruma Ait VPN Kullanımında Politika Bazlı Ağ Trafiği Kontrol Sistemi ve Yöntemi), Inventors: Huseyin Barış Gürkan, Vedat Coskun; TPE Registration Number: 2022/017609, Registration Date: (under review).

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