CURRICULUM VITAE PROF. IVAN CHORBEV, PHD

1. **Name Surname:**   **Ivan Chorbev**

2. **Date of birth:**   **27.04.1980**

3. **Contact:**   **e-mail: ivan.chorbev@finki.ukim.mk, phone +389.77.804880**

4. **Education:**

Institution (Date from - Date to)	Degree(s) or Diploma(s) obtained:
"Ss. Cyril and Methodius" University – Skopje, Faculty of Electrical Engineering and Information Technologies (2006-2009)	PhD in Computer Science and Engineering
"Ss. Cyril and Methodius" University – Skopje, Faculty of Electrical Engineering and Information Technologies (2004–2006)	M.Sci, Master of Science in Computer Engineering
"Ss. Cyril and Methodius" University – Skopje, R. of North Macedonia, Faculty of Electrical Engineering, (1999-2004)	B.Sci, University degree in Electrical Engineering, Computer Technique, Informatics and Automatics

5. **Language skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)**

Language	Reading	Speaking	Writing
English	1	1	1
German	5	4	5
Macedonian (native)	1	1	1
Serbian, Croatian, etc	1	1	3

6. **Membership of professional bodies: IEEE, ACM, ICT ACT, ETAI**

7. **Other skills:** Experience with various computer tools and technologies including Microsoft Office, Microsoft .NET, JAVA, C/C++, HTML, CSS, MS SQL Server, JavaScript, Adobe Photoshop, PHP, PHP Frameworks, MySQL.

8. **Present position:** University Professor, Faculty of Computer Science and Engineering, "Ss. Cyril and Methodius" University – Skopje, Republic of North Macedonia. Head of the Software Engineering Department.

   Management Board member of the Business Accelerator UKIM, Technology Transfer, Incubation and Business Acceleration (http://accelerator.ukim.mk/)

9. **Key qualifications:** Ivan Chorbev main interests and activities include Software engineering, Project Management, Machine learning, ERP systems, University information systems, Learning management systems, Assistive technologies, eHealth, E-Government. He served 7 years for two terms as dean of the faculty as a legal entity with 4,000 students and 100 employees. He serves as the member of the Board of Directors in the Business Accelerator UKIM representing the major shareholder - the Ss Cyril and Methodius University (UKIM) actively participating in evaluating startups for investment. Regularly participates as a mentor and speaker in hackathons, conferences, various events to promote ICT and entrepreneurship.

   He has published more than 100 research papers in the area of machine learning, data science, telemedicine, assistive technologies, software engineering, heuristic optimization, etc. He was involved or coordinated in 20 international application and research projects funded by TEMPUS, FP6, H2020, Erasmus, COST, Horizon Europe. He has developed and managed digital platforms and information systems for over two decades.

10. **Specific experience in the region (if any):**

Country	Date from - Date to
Serbia, Web ERP software	2006-2008
Canada, Web platforms, ERP software	2007-2009
North Macedonia	2005-2022
Serbia, Innovation Fund Expert Evaluator	2018-2022
North Macedonia, Innovation Fund Expert Evaluator	2018-2022

11. Professional experience (selected)

Date	Location	Company& reference person	Position	Description of duties relevant to the required specifications
10/2005 - present	Skopje	Faculty of Computer Science and Engineering, "Ss. Cyril and Methodius" University – Skopje Mr. Igor Cvetanovski	University Professor	Research and teaching in the areas of Computer Science, Web Software development, Software engineering, Information Systems Analyses and Design, ERP systems, Knowledge extraction. Specific professional experience Teaches courses on Web development and Integrated Systems (Web Design, Advanced Web Design PHP Web development), Integrated Systems, Prepared tendering documentation of software licences
3/2007 2/2008	Skopje	OKTA oil refinery Skopje	ICT and ERP systems Consultant, Software developer	Information system analysis and consulting for OKTA oil refinery Skopje. External expert and software developer. Period: 3.2007 – 2.2008. Thorough study on the advancement of IT solutions and infrastructure for the oil refinery Specific professional experience ERP systems analysis, upgrade and modules development. Migration to Web Based platforms, Development, testing and deployment of new Information systems.
7/2003-10/2005	Skopje	THome – Macedonian Telecommunications Mr. Petar Damjanovski	Software developer	Worked as a Software developer in 20 IT Web Based projects for internal in-house and external projects for several North Macedonian or international companies (ePayment, eBanking and Ecommerce applications etc.). Specific professional experience Developed Web applications, Prepared tendering documentations for 5 procurement exercises (ePayment, eBanking, eCommerce applications, ADSL, Digital Certificate)
10/2010 – 10/2012	Skopje	"Ss. Cyril and Methodius" University – Skopje Project Tempus JPGR 511342 - iKnow (Innovation and Knowledge Management towards eStudent Information System) Mr. Igor Cvetanovski	Software development project manager	Project Tempus JPGR 511342 - iKnow, Innovation and Knowledge Management towards eStudent Information System iKnow. Funded by the European Union TEMPUS program. Benefited by all public and 3 private universities in the Republic of North Macedonia. The project consisted of designing and developing an integrated university information system, including students and teachers personal data protection. Maintenance and Support of the Information system for the university still ongoing – 7.2021 Specific professional experience Develop, test and deploy a university information system with learning management capabilities.

6/2014 -6/2015	Skopje	Blizoo telecommunication provider Mr. Kiril Trendafilov	Project Manager and Software team leader	Managed IT development projects in the area of Web based Enterprise Resource Planning (ERP) Systems for the BLIZOO telecommunication provider. Developed Web based ERP modules (Procurement management, Human Resources, Time & Attendance). (Now taken over by A1 telecommunications operator).
7/2003-10/2005	Skopje	Faculty of Computer Science and Engineering, "Ss. Cyril and Methodius" University – Skopje Mr. Igor Cvetanovski	Software developer, Team member	Establishment of eLearning platform for the Faculty of Computer Science and Engineering, 2011. Platform: https://courses.finki.ukim.mk/ Specific professional experience: Deployment, testing and configuration of a complex Moodle LMS instance with over 140 parallel courses integrated with iKnow – the university information system.
5/2006 – present	Skopje	Stopanska banka AD Skopje Mr. Kristijan Spirov	Software Developer, P. Manager	Duties included managing the IT projects of development testing and implementation of modules in web based banking information systems, management of sensitive banking data. Continual consultancy cooperation.
5/2009 – 10/2012	Skopje	Non-government Organization NDI Macedonia Mr. Gezim Jashari	Project Manager	Duties included managing and supporting the IT assistance projects of designing, development and testing of several internal web based information system, document management system, e-government system, managing politically delicate data and personal information. Specific professional experience: Integrated Web based system development and software project management
9/2006 – 5/2009	Canada	https://www.ccfsmac.com/ http://www.1energygroup.org/home.aspx Mr Alexandar Betinski	Software developer, Project Manager	Implementation of an online Web based payment billing management system, invoicing, financial analysis, (https:// ccfsmac.com/) Web Software Developer and project manager. Period: 1.6.2007 – 1.10.2011. Develop, test and maintain MS.NET and MS SQL Server based web business information systems. Specific professional experience Developed Web based applications and an ERP system
2005 - now	North Macedonia, Serbia	Commercial bank - Skopje, Stopanska banka Skopje, FENI industries, REK Bitola, Diners, Alkaloid, Johnson Controls, TAV Airports Macedonia, ADIENT vesna.taskovska@kb.com.mk	Software developer and Project manager	Time and attendance system Specific professional experience Web Software for Time attendance development and management

2/2014 – 10/2014	Skopje	Faculty of Medicine, Dept. of Paediatrics Mr. Igor Veljkovik	Project manager and trainer.	Implementation of an eLearning system for the Faculty of Medicine, Dept. of Paediatrics, funded by an UNICEF project. Duties included managing the IT assistance project of implementation of a Web based eLearning system for the Faculty of Medicine, Dept. of Paediatrics Specific professional experience: Deployed, tested and customized an instance of Moodle Open Source Learning system. Setting up a Moodle instance and development of a complete online course for Paediatrics
2014-2015	Skopje	Library System for the Parliament of the Republic of N.Macedonia Mr. Gezim Jashari	Project manager and developer	Collaboration with NextSense ltd, financed by Non-government Organization NDI Macedonia for the Parliamentary Institute within the Parliament Design of the database and software, development of a web application for the Library, Library information system.
2014 – 2016.	Skopje	NGO Open the windows Donor – US AID. Ms. Margarita Gulevska	Project manager Developer	Development of serious educational games. Developed JavaScript based web applications for learning basic literacy in Macedonian and Albanian language for primary schools. Also, special educational games for children with special needs
11/2016 -8/2019	Skopje	funded after the call: KA2 - Cooperation for Innovation and the Exchange of Good Practices - Strategic Partnerships for adult education, Horizon 2020, European Union. EC Erasmus+ Programme project no. 2016-1-UK01KA204-024508 Mr Mark Springett (Project Lead)	Project manager	Erasmus project: Gameplay for Inspiring Digital Adoption (GIRDA), The project aims to encourage older people to become more confident in using digital products for everyday activities and uses games as a way to gradually expose them to the digital landscape The project proposed a novel approach to digital education for older citizens. The approach used touch table and touch tablet games to introduce older citizens to digital interaction. Objectives: To understand what it is about games that can be useful in developing digital skills of older citizens. To examine how giving support and advice, or simply playing the games with a new learner can provide maximum benefits. To develop advice for those who want to play a role in helping older people through the early stages of learning. This includes practical advice and online materials such as video to help these mentors, volunteers and trainers.

10/2017 - 10/2021	Skopje	EC Cost Action CA16226, EU H2020 Mr. Francisco Melero Muñoz		Indoor living space improvement: Smart Habitat for the Elderly (SHELD-ON) The main aim of sheld-on is to establish a multidisciplinary network to support the development of research and solutions that allow the elderly to live safely, comfortably, and healthily at home later in life. These solutions will be created by integrating design, ICT, ergonomics and health knowledge into furniture and building design. To design, develop and test smart support furniture and habitat environments according to user's needs and further validated by these users (elderly and caretakers) for an active ageing. Assess state of the art for disciplinary understanding, identification of advances in smart furniture and habitat, products, industries, success stories, etc. Development of a Massive Open Online Courses (MOOC) for the domain of assistive technologies
2/2009 - present	Skopje	The Faculty of Economics in Skopje, University "Ss. Cyril and Methodius" Mr. Saso Nikolovski	Software Developer and Team leader, Project Manager	Duties include managing and supporting the IT assistance projects of Designing and development of a web based university information system, Students Data Management, Document Management System - DMS, Public Content Management System Specific professional experience Web based applications development, testing and maintenance
12/2019 – 12/2022	Skopje	NGO NDI Macedonia – National Assembly of the Republic of N. Macedonia Mr. Edip Bilal	Project Manager	Consultant to the National Assembly of the Republic of North Macedonia via NDI North for preparation of a technical specification and tendering documentation (ToR) for several systems: E-Parlament, Web Site, ERP system, DMS, OpenData platform, CSO registry, ICT strategy of the Assembly etc. Specific professional experience: Preparation of public tendering documentation and technical specification

11/2018 – 11/2021	Skopje	EC Erasmus+ Programme KA2 project no. 2017-1-LT01-KA201-035296 Dr. Konstantinos Petridis	Project Manager	Innovative Teaching Educating in Mathematics (iTEM) Main objective is to improve the teaching, learning, and understanding of 1st-year Mathematics among Engineers in Europe, Israel, Kosovo, and Uzbekistan. The main tools will be employed are (a) Calculus Assisted Tools; (b) Innovative Teaching Methods; and (c) Real Life Problems that can be tackled using fundamental Mathematics taught in Calculus I and Linear Algebra I. The consortium will focus to bring a breath of fresh air in the way Mathematics is taught. This objective will be approached using: New Teaching Approaches e.g. Problem Based Learning and Project Oriented Based Learning (Leading Partner: AAU) Incorporate tools to identify the weak students and provide them support to continue their studies (Leading Partners: CVUT, UMIT, UKIM) Introduce CAS tools during teaching Mathematics (Leading Partner: ULL) Introduce Simulations to visualize Mathematics (Leading Partner:) Introduce Real Life Problems and Tasks along teaching Mathematics (Leading Partner: KSU) Organize Intensive Courses for the Training of Math Teachers and Students (Leading Partners: AAU, ULL, UMIT) Evaluate the effectiveness of the proposed techniques and tools regarding the students understanding and exam success rates after their application (Leading Partner: WIS) Integrating the proposed techniques and tools into their existed Linear Algebra and Calculus I courses (Leading Partners: HMU, HIT, HAC, UKIM, NUUz, TUIT, UC, UMIB, UP and KEEI)

11/2018 – 11/2021	Skopje	EC Erasmus+ Programme KA2 project no. 2017-1-LT01-KA201-035296 Dr.-Ing. Volker Koch	Project Manager	ESSENSE Higher Education Programme on Building Information Modelling towards the development of Smart Environments for Seniors ESSENSE consists of a transdisciplinary Strategic Partnership, bringing together higher education institutions, Vocational Education and Training (VET) institutions, business associations and representatives of social enterprises. Each bringing different expertise related to BIM, project management, Information and Communication Technologies as well as Smart Housing and Ambient Assisted Living, where collaboration will be reinforced on problems as important as the ageing population. The main aim of ESSENSE is to develop and implement a common curriculum and learning approach on BIM towards the design, construction and management of public and private environments for older adults that will meet the learning needs of Higher Education students. Development of an educational philosophy and joint curriculum according to the target groups needs having as a basis both the skills and competences required for the use of BIM tools for the design, construction and adaptation of environments for an active and healthy ageing. The development of didactic materials, tools and assessment methods. http://moodle.essense-project.eu/
9/2020 – 9/2022	Skopje	EC H2020 project no. 951732 Dr. Bastian Koller	Project Manager	Within the EuroHPC Competence Centers project under the EU Horizon 2020 (H2020), participating countries are tasked with establishing a single National Competence Centre (NCC) in the area of high-performance computing (HPC) in their respective countries. Produce online courses for HPC, HPDA, AI
3/2017 – 10/2017	Skopje	EuropeAid/135834/IH/SER/MK, Enhancing Lifelong Learning through Modernizing the Vocational Education and Training and Adult Education Systems, IPA Component IV, British Council	Expert consultant	Technical specifications along with tender dossier for procurement of a Web based Monitoring and Evaluation Database and Information Management System for vocational education and training and adult education prepared and produced Specific professional experience: PRAG tender preparation for a Web application
05.12.2018 - 04.08.2020	Skopje	Support for evidence-based policy making in the education sector, Donor: British Embassy Skopje via UNICEF	Expert consultant	IT expert for supporting the Ministry of Education and Science in establishing and developing analytical unit that will ensure evidence - based policy development and decision making in the sector of education and science. A Specification to upgrade and enhance the Web based application eDnevnik and ESARU information systems for complete management of primary and high school students and studies.

1/2021 12/2021	Skopje	iLearn; contact: Prof. Hristina Spasevska PhD, (Vice rector)	Team member	University's Moodle platform for over 23 faculties and all their courses (in development). Platform: https://ilearn.ukim.edu.mk/
8.2018 – ongoing	Skopje	eNapsis, Public system for online payment of administrative tax managed by the Ministry of Information society and administration of the Republic of North Macedonia. https://admin.e-plakanje.gov.mk/ solza.kovachevska@mioa.gov.mk	Project manager and team leader	The Web based Electronic Payment System – eNAPSIS is a complex system that enables electronic payments. This is a system that uses the fundamental concepts of the e-payment, system that enables to the citizens an alternative for safe and fast way of payment of services, using the Internet and mobile phones as means of payment. Specific experience: Web Software platform and modules development, testing, deployment and maintenance after winning a public tendering procedure.
1.2019 – 1.2020	Bitola	Cross4all Cross-border initiative for integrated health and social services promoting safe ageing, early prevention and independent living for all (Reg. No: 1816 / Subsidy Contract No: Cross4all-CN1-SO1.2-SC015)	Project manager	In this project, good practices and innovative ICT-based solutions from the fields of tele-monitoring and personal health records will be elaborated and exploited in order to equip the staff of the envisioned interconnected centres of reference for health issues with appropriate resources and tools to better address the needs of elderly and people with disabilities. Specific experience: Web based eReferal and ePrescription software modules development, testing and deployment after winning a tendering procedure run under PRAG regulations..
2012-2016	EU	EU funded COST action on Geospatial Information Crowdsourcing: software and methodologies for harnessing geographic information from the crowd (ENERGIC), FP 7.	Management committee member	Organized several research experiments and published scientific papers on utilizing crowdsourcing software and methodologies for harnessing geographic information including voluntary information on noise pollution, water and air pollution as well as water levels etc.
2021	EU	Indoor living space improvement: Smart Habitat for the Elderly (SHELD-ON), Mr. Francisco Melero Muñoz	Project Manager	Development of a Massive Open Online Courses (MOOC) for the domain of assistive technologies. The main aim of sheld-on is to establish a multidisciplinary network to support the development of research and solutions that allow the elderly to live safely, comfortably, and healthily at home later in life. These solutions will be created by integrating design, ICT, ergonomics and health knowledge into furniture and building design.

12/2020 – 2/2022	Skopje	21st Century Schools is an ambitious 10 million pounds three-year education programme, designed and implemented by the British Council and funded by the UK Government Eleonora Zaprova | Director Macedonia	Team member	**21st Century Schools: improving classroom practice** Run in partnership with relevant educational institutions in each country, the programme is designed to equip students aged 10-15 years with the critical thinking and problem solving skills. As well as learning critical thinking and problem solving skills, children will learn practical programming skills and have the opportunity to practice their skills through physical computing. Deployment of BigBlueButton video conferencing platform (cluster of 4 servers and integration with Moodle. Support of Moodle server infrastructure Moodle administrative staff: Maintenance of LMS/BigBlueButton video conferencing platform; Moodle administration, support to trainers
11.2020 – 9-2020	Danilovgrad, Montenegro, Regional	BISTOR	Expert consultant	Expert for the call for proposals and assistance in the procurement process related to Development of ReSPA Web based Business Information System. I prepared the tender ToR. Support to compiling the tender documentation in line with the provisions in the TOR for BIS development and EU PRAG requirements and forms. In the tendering phase I provided expert assistance to the Chair of the procurement process in terms of analysing proposals, recommend solutions, questions and responses from ReSPA. I provided expert support in the overall procurement process in the capacity of Advisor and Observer in the follow up procurement process up to the signing of the contract with the winning bidder
8/2021 – 12/2021	Skopje	"Support to Electoral Reforms in North Macedonia" is a project of the Swiss Agency for Development and Cooperation (SDC), implemented by the International Foundation for Electoral Systems (IFES) and its partner National Youth Council of Macedonia (NYCM)	Project manager and developer	Development of four interactive E-Learning courses that were integrated into the SEC's online learning platform for Election Stakeholders. • Municipal election commissions (8 modules) • Electoral boards (10 modules) • Political parties and candidates (5 modules) • Voters (3 modules) Responsible for the design, storyboarding and development of the learning modules (transferring the content and education materials into an online format) and combine them into courses for the SEC's online learning platform.
2019-ongoing	Skopje, North Macedonia	Business Accelerator UKIM	Board of Directors Member, Expert Evaluator	Board of Directors member, representing the University's stake, the largest shareholder, in the Business Accelerator UKIM. Participate in corporate management and oversight policies. Participate in the final stage of startups evaluation and participate in every final BoD decision over accelerator investments in startups. Guide, mentor and oversight of startups associated with the accelerator.

2018-2022	North Macedonia	Fund for Innovation and Technological Development	Expert Evaluator	Evaluate project proposals for possible investment by the Innovation Fund of the Republic of North Macedonia. Additional oversight of several software projects development for public institutions supported by the Fund. Over 50 evaluated projects
2018-2022	Serbia	Serbian Innovation Fund	Expert Evaluator	Evaluate project proposals for possible investment by the Innovation Fund of the Republic of Serbia. Over 70 evaluated projects
2015 - 2022	North Macedonia	Faculty of Computer Science and Engineering, "Ss. Cyril and Methodius" University – Skopje Mr. Igor Cvetanovski	Faculty Dean	Manage the Faculty with 100 employees and 5000 students, Obligations include management of students, educational processes, human resources, international projects, strategic planning and investment. Lead collaboration with companies, public institutions, the government, civic organizations in the domains of science, research, innovation and entrepreneurship.
5/2022 – 12/2022	North Macedonia	United Nations Population Fund Ms. Biljana Taneska	Individual Consultant Contract	Development and delivery of a series of three two-days workshops for presentation of the consultants work on the potential use of big data for migration population analysis as a non-traditional source of data for estimation of migration stocks and flows. UNFPA CO in North Macedonia, together with IOM and UNHCR, and in coordination with the UN Resident Coordinator's Office, implementing a Joint Program (JP) "Evidence based migration policy planning and discourse in North Macedonia", financed by the Global Migration Multi Partner Trust Fund (MPTF).
1/2022-8/2023	North Macedonia	Parliament of North Macedonia, through Center For Change Management, an NGO, Neda Maleska Sachmaroska Executive Director	Individual Consultant Contract	Preparation of an ICT Strategy for the Parliament of North Macedonia.
2/2023 – 10/2023	North Macedonia	United Nations Population Fund Ms. Biljana Taneska	Individual Consultant Contract	UNFPA CO in North Macedonia, together with IOM and UNHCR, and in coordination with the UN Resident Coordinator's Office, implementing a Joint Program (JP) "Evidence based migration policy planning and discourse in North Macedonia". Piloting the usage of Big data for migration population analysis as a non-traditional source for estimation of migration stocks and flows; Analysis of Telecommunications big dataset with Machine Learning.

15. Other relevant information

Participation in research projects

- Risk Assessment for Customs in Western Balkans, Funded by European Union Framework Program 6 - FP6, January 2008 – December 2008 (RACWeB project aimed to improve the Western Balkans and EU neighboring countries customs efficiency and transparency through the utilization of data mining techniques and web-based risk assessment service.). Research Expert.

- Project Tempus JPGR 511342 - iKnow, Innovation and Knowledge Management towards eStudent Information System iKnow. Funded by the European Union TEMPUS program.

- Project manager for the University Ss. Cyril and Methodius in Skopje. Web Software development project manager. Maintenance and Support of the Web Information system for the university still ongoing – 2.2018.

- COST action IC0602, Management Committee member, Funded by the European Union FP 7 program. (Decision Theory, Artificial Intelligence). Management Committee member. Period: 3.5.2007 – 2.5.2011

- COST action IC1002 MUMIA, Management Committee member, Funded by the European Union FP 7 program. (Machine Translation (MT), Information Retrieval (IR) and Multifaceted Interactive Information Access (MIIA)) Period: 30.11.2010 – 29.11.2014

- Project manager of the Erasmus project: Gameplay for Inspiring Digital Adoption (GIRDA), funded after the call: KA2 - Cooperation for Innovation and the Exchange of Good Practices - Strategic Partnerships for adult education, Horizon 2020, European Union.

- COST ICT Action IC1203 ENERGIC , Management Committee member, Funded by the European Union FP 7 program - European Network Exploring Research into Geospatial Information Crowdsourcing: software and methodologies for harnessing geographic information from the crowd (ENERGIC), FP 7. Period 5.12.2012 – 4.12.2016

- ICT COST Action IC1303, Algorithms, Architectures and Platforms for Enhanced Living Environments (AAPELE) Management Committee member, Funded by the European Union FP 7 program, FP 7. Period 13.11.2013 – 12.11.2017

- Vice chair and Management Committee member of Open Multiscale Systems Medicine, CA COST Action CA15120, COST is supported by the EU Framework Programme Horizon 2020. Period 5.4.2016 – 5.4.2020

- STSM Coordinator in COST Action CA19136 - NET4Age-Friendly, International Interdisciplinary Network on Health and Wellbeing in an Age-Friendly Digital World, to promote social inclusion, independent living and active and healthy ageing in society. Period 21.10.2020 – 21.10.2024

- CA16226 - Indoor living space improvement: Smart Habitat for the Elderly. STSM grants evaluator. Period 24.10.2017 – 23.10.2021

- Project manager of Erasmus project: Innovative Teaching Education of Mathematics - (ITEM), Capacity-Building projects in the field of Higher Education (E+CBHE), Horizon 2020, European Union.

- Project manager of Erasmus project: ESSENSE (Education Supporting Smart ENvironments for SEniors), Horizon 2020, European Union.

- EC H2020 project no. 951732, Project Manager in the team in EuroHPC Competence Centers (EuroCC), establishing a single National Competence Centre (NCC) in the area of high-performance computing (HPC)

Published papers

[1]. Stojmenski, A.; Gusev, M.; Chorbev, I.; Tudjarski, S.; Poposka, L.; Vavlukis, M. Age and Gender Impact on Heart Rate Variability towards Noninvasive Glucose Measurement. Sensors 2023, 23, 8697. **https://doi.org/10.3390/s23218697** **IMPACT FACTOR 3.9**

[2]. VM Jonuzi, I Mishkovski, I Chorbev, A SURVEY ON INTERNET OF THINGS BASED SMART BIN, KNOWLEDGE-International Journal 61 (3), 443-448

[3]. B. Joksimoski, A. Popovska-Mitrovikj, V. Dimitrova, I. Chorbev (2023) EXPERIENCES IN DIGITALIZATION OF MATHEMATICS LEARNING IN HIGHER EDUCATION, INTED2023 Proceedings, pp. 4765-4772.

[4]. E. M. Jovanovska, I. Chorbev, D. Davcev and K. Mitreski, "Integrated IoT System for Prediction of Diseases in the Vineyards," 2022 International Conference on Electrical, Computer, Communications and Mechatronics Engineering (ICECCME), Maldives, Maldives, 2022, pp. 1-6, doi: 10.1109/ICECCME55909.2022.9988415.

[5]. Pimenta, Luís, Nuno M. Garcia, Eftim Zdravevski, Ivan Chorbev, Vladimir Trajkovik, Petre Lameski, Carlos Albuquerque, and Ivan Miguel Pires. 2022. "Can the Eight Hop Test Be Measured with Sensors? A Systematic Review" Sensors 22, no. 9: 3582. https://doi.org/10.3390/s22093582, **IMPACT FACTOR 3.847**

[6]. Lameski, P., Zdravevski, E., Kulakov, A., Chorbev, I. and Trajkovikj, V., 2022. 2.2. 4 Applications of Deep Learning Based Semantic Segmentation of Images. In Enlargement and Integration Workshop.

[7]. Joksimoski, B., Zdravevski, E., Lameski, P., Pires, I.M., Melero, F.J., Martinez, T.P., Garcia, N.M., Mihajlov, M., Chorbev, I. and Trajkovik, V., 2022. Technological solutions for sign language recognition: a scoping review of research trends, challenges, and opportunities. IEEE Access. **Impact Factor: 3.367**

[8]. Dimitrova, V., Popovska Mitrovikj, A., CHorbev, I. and Joksimoski, B., 2021. IMPROVING TEACHING AND LEARNING MATHEMATICS COURSES IN COMPUTER SCIENCE AND ENGINEERING STUDIES.

[9]. Ferreira, F., Pires, I.M., Ponciano, V., Costa, M., Villasana, M.V., Garcia, N.M., Zdravevski, E., Lameski, P., Chorbev, I., Mihajlov, M. and Trajkovik, V., 2021. Experimental Study on Wound Area Measurement with Mobile Devices. Sensors, 21(17), p.5762. **IMPACT FACTOR 3.847**

[10]. Jevremovic, A., Veinovic, M., Cabarkapa, M., Krstic, M., Chorbev, I., Dimitrovski, I., Garcia, N., Pombo, N. and Stojmenovic, M., 2021. Keeping Children Safe Online With Limited Resources: Analyzing What is Seen and Heard. IEEE Access, 9, pp.132723-132732. **Impact Factor: 3.367**

[11]. Pires, I.M., Denysyuk, H.V., Villasana, M.V., Sá, J., Lameski, P., Chorbev, I., Zdravevski, E., Trajkovik, V., Morgado, J.F. and Garcia, N.M., 2021. Mobile 5P-Medicine Approach for Cardiovascular Patients. Sensors, 21(21), p.6986. **IMPACT FACTOR 3.847**

[12]. Ferreira, F., Pires, I.M., Costa, M., Ponciano, V., Garcia, N.M., Zdravevski, E., Chorbev, I. and Mihajlov, M., 2021. A Systematic Investigation of Models for Color Image Processing in Wound Size Estimation. Computers, 10(4), p.43.

[13]. Wang, H., Pujos-Guillot, E., Comte, B., de Miranda, J.L., Spiwok, V., Chorbev, I., Castiglione, F., Tieri, P., Watterson, S., McAllister, R. and de Melo Malaquias, T., 2021. Deep learning in systems medicine. Briefings in Bioinformatics, 22(2), pp.1543-1559. **Impact Factor 13.994**

[14]. Lameski, P., Bidikov, V., Kjiroski, K., Jakimovski, B., Zdravevski, E., Chorbev, I. and Trajkovik, V., Transition from the classroom to online educational environment: First impressions.

[15]. Dimitrievski, A., Savoska, S., Chorbev, I., Ristevski, B. and Trajkovik, V., 2019. Data Processing within Ambient Assisted Living System.

[16]. Villasana, M.V., Pires, I.M., Sá, J., Garcia, N.M., Teixeira, M.C., Zdravevski, E., Chorbev, I. and Lameski, P., 2020, September. Promotion of Healthy Lifestyles to Teenagers with Mobile Devices: A Case Study in Portugal. In Healthcare (Vol. 8, No. 3, p. 315). Multidisciplinary Digital Publishing Institute. **Impact Factor 3.160**

[17]. Villasana, M.V., Pires, I.M., Sá, J., Garcia, N.M., Zdravevski, E., Chorbev, I., Lameski, P. and Flórez-Revuelta, F., 2020. Promotion of Healthy Nutrition and Physical Activity

Lifestyles for Teenagers: A Systematic Literature Review of The Current Methodologies. Journal of Personalized Medicine, 10(1), p.12. **Impact Factor 3.508**

[18]. Barakovic Husic, J., Melero, F.J., Barakovic, S., Lameski, P., Zdravevski, E., Maresova, P., Krejcar, O., Chorbev, I., Garcia, N.M. and Trajkovik, V., 2020. Aging at Work: A Review of Recent Trends and Future Directions. International Journal of Environmental Research and Public Health, 17(20), p.7659. **Impact Factor 4.614**

[19]. Villasana, M.V., Pires, I.M., Sá, J., Garcia, N.M., Zdravevski, E., Chorbev, I., Lameski, P. and Flórez-Revuelta, F., 2019. Mobile Applications for the Promotion and Support of Healthy Nutrition and Physical Activity Habits: A Systematic Review, Extraction of Features and Taxonomy Proposal. The Open Bioinformatics Journal, 12(1).

[20]. Villasana, M.V., Pires, I.M., Sá, J., Garcia, N.M., Pombo, N., Zdravevski, E. and Chorbev, I., 2019, September. CoviHealth: Novel approach of a mobile application for nutrition and physical activity management for teenagers. In Proceedings of the 5th EAI International Conference on Smart Objects and Technologies for Social Good (pp. 261-266).

[21]. Salkoski, R. and Chorbev, I., Design optimization of Earthing Transformers based on Differential Evolution Algorithms.

[22]. Snezana Savoska, Ilija Jolevski, Blagoj Ristevski, Natasha Blazeska-Tabakovska, Andrijana Bocevska, Boro Jakimovski, Ivan Chorbev, Vassilis Kilintzis, Design of Cross Border Healthcare Integrated System and its Privacy and Security Issues, Computer and Communications Engineering, Vol. 13, No. 2/2019, pp. 58-64, Workshop on Information Security 2019, 9th Balkan Conference in Informatics, 26-28 September 2019, Sofia, Bulgaria

[23]. Eftim Zdravevski, Petre Lameski, Vladimir Trajkovik, Ivan Chorbev, Rossitza Goleva, Nuno Pombo, Nuno M. Garcia (2019) Automation in Systematic, Scoping and Rapid Reviews by an NLP Toolkit: A Case Study in Enhanced Living Environments. In: Ganchev I., Garcia N., Dobre C., Mavromoustakis C., Goleva R. (eds) Enhanced Living Environments. Lecture Notes in Computer Science, vol 11369. Springer, Cham

[24]. Huiru Zheng, Jyotsna Talreja Wassan, Mihnea Alexandru Moisescu, Lacramioara Stoicu-Tivadar, João Miranda, Mihaela Crisan-Vida, Ioan Stefan Sacala, Almir Badnjevic, Ivan Chorbev, Boro Jakimovski, "Multiscale Computing in Systems Medicine: a Brief Reflection," 2018 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), Madrid, Spain, 2018, pp. 2190-2195.doi: 10.1109/BIBM.2018.8621361

[25]. Dario Stojanovski, Gjorgji Strezoski, Gjorgji Madjarov, Ivica Dimitrovski, Ivan Chorbev. Deep neural network architecture for sentiment analysis and emotion identification of Twitter messages, Multimed Tools Appl (2018) 77: 32213, 2.577 (2021) **Impact factor 2.577**

[26]. Gavrilov, G. and Jakimovski, B. and Chorbev, I. and Trajkovik, V. (2018) Cloud-Based Electronic Health Record for Health Data Exchange. "St Kliment Ohridski" University - Bitola, Faculty of Information and Communication Technologies-Bitola, Republic of North Macedonia, pp. 11-16. ISBN 978-9989-870-80-4

[27]. Maresova P, Tomsone S, Lameski P, Madureira J, Mendes A, Zdravevski E, Chorbev I, Trajkovik V, Ellen M, Rodile K. Technological Solutions for Older People with Alzheimer's Disease. Current Alzheimer research. 2018 Apr 27. **Impact Factor 3.289**

[28]. Massimiliano Zanin, Ivan Chorbev, Blaz Stres, Egils Stalidzans, Julio Vera, Paolo Tieri, Filippo Castiglione, Derek Groen, Huiru Zheng, Jan Baumbach, Johannes A Schmid, José Basilio, Peter Klimek, Nataša Debeljak, Damjana Rozman, Harald H H W Schmidt; Community effort endorsing multiscale modelling, multiscale data science and multiscale computing for systems medicine, Briefings in Bioinformatics, , bbx160, https://doi.org/10.1093/bib/bbx160, **Impact Factor 5.134**

[29]. Ruben Nuredini, Bekim Fetaji, Ivan Chorbev, "Bio-inspired Obstacle Avoidance: From Animals to Intelligent Agents," Journal of Computers vol. 13, no. 2, pp. 146-153, 2018

[30]. BOGDANOVA AM, ACHKOSKI J, TASIC J, CHORBEV I. Telemedicine in Macedonia– Smart I (Eye) Advisory Rescue System. Benchmarking Telemedicine: Improving Health Security in the Balkans. 2017 Oct 25;49:1.

[31]. Tudjarova S., Chorbev I., Joksimoski B. (2017) Software Quality Metrics While Using Different Development Methodologies. In: Trajanov D., Bakeva V. (eds) ICT Innovations

2017. ICT Innovations 2017. Communications in Computer and Information Science, vol 778. Springer, Cham.

[32]. Autexier, Serge; Goleva, Rossitza; Garcia, Nuno M.; Stainov, Rumen; Ganchev, Ivan; Mavromoustakis, Constandinos X.; Dobre, Ciprian; Chorbev, Ivan; Trajkovik, Vladimir; Zdravevski, Eftim: 'End-users' AAL and ELE service scenarios in smart personal environments' (Healthcare Technologies, 2017), 'Enhanced Living Environments: From models to technologies', Chap. 5, pp. 101-131, DOI: 10.1049/PBHE010E_ch5

[33]. Mishev K, Stojmenski A, Dimitrovski I, Dimitrova V, Chorbev I. Cloud services for faculty workflow automatization, CIIT.

[34]. Eftim Zdravevski, Petre Lameski, Vladimir Trajkovik, Andrea Kulakov, Ivan Chorbev, Rossitza Goleva, Nuno Pombo, Nuno Garcia, Improving Activity Recognition Accuracy in Ambient Assisted Living Systems by Automated Feature Engineering, IEEE Access, Volume: PP Issue: 99, DOI: 10.1109/ACCESS.2017.2684913, **Impact Factor: 1.270**

[35]. Chorbev, I., Trajkovik, V., Goleva, R.I. and Garcia, N.M., 2017. Cloud Based Smart Living System Prototype. In Ambient Assisted Living and Enhanced Living Environments Principles, Technologies and Control (pp. 147-170). Butterworth-Heinemann. Elsevier.

[36]. Goleva, R.I., Garcia, N.M., Mavromoustakis, C.X., Dobre, C., Mastorakis, G., Stainov, R., Chorbev, I. and Trajkovik, V., 2017. AAL and ELE Platform Architecture. In Ambient Assisted Living and Enhanced Living Environments (pp. 171-209). Butterworth-Heinemann.

[37]. A. Guseva, M. Gusev and I. Chorbev, "iKnow usability: A case study," 2016 24th Telecommunications Forum (TELFOR), Belgrade, 2016, pp. 1-4. doi: 10.1109/TELFOR.2016.7818904

[38]. Aleksandar Stojmenski, Boban Joksimoski, Ivan Chorbev and Vladimir Trajkovikj, Smart home environment aimed for people with physical disabilities, IEEE 12th International Conference on Intelligent Computer Communication and Processing, Cluj Napoca, Romania, 2016

[39]. Rankovski G., Chorbev I. (2018) Improving Scalability of Web Applications by Utilizing Asynchronous I/O. In: Stojanov G., Kulakov A. (eds) ICT Innovations 2016. ICT Innovations 2016. Advances in Intelligent Systems and Computing, vol 665. Springer, Cham

[40]. Stojanovski, D., Chorbev, I., Dimitrovski, I. and Madjarov, G., 2016. Social networks vgi: Twitter sentiment analysis of social hotspots. European Handbook of crowdsourced geographic information, p.223..

[41]. Nuno Pombo, Nuno Garcia, Kouamana Bousson, Susanna Spinsante and Ivan Chorbev, Pain Assessment–Can it be Done with a Computerised System? A Systematic Review and Meta-Analysis, Int. J. Environ. Res. Public Health 2016, 13(4), 415; doi: 10.3390/ijerph13040415, Impact Factor: 2.063 (2014); 5-Year Impact Factor: 2.493 (2014)

[42]. Marjan Gushev, Aleksandar Stojmenski, Ivan Chorbev, Challenges for development of an ECG m-Health solution, ERSICT, the International Journal of Emerging Research and Solutions in ICT

[43]. Stojmenski, A., Gusev, M. and Chorbev, I.A., 2016. mobile application for ECG detection and feature extraction. In Proceedings of the Int (pp. 299-306).

[44]. Rasim Salkoski and Ivan Chorbev, Design optimization of Booster Transformers based on Differential Evolution Algorithms, ETAI 2016

[45]. Atanas Krangov, Boban Joksimoski, Aleksandar Stojmenski and Ivan Chorbev, Comparison of modern programming techniques for rapid web application development, ICT_Innovations_2016

[46]. Aleksandar Stojmenski, Vlatko Nikolovski, Ivan Chorbev and Vesna Dimitrova, Cross platform system integration using web services, CIIT 2016, Molika, Bitola, R. of Macedonia

[47]. Goleva, R., Stainov, R., Savov, A., Draganov, P., Nikolov, N., Dimitrova, D. and Chorbev, I., 2016. Automated ambient open platform for enhanced living environment. In ICT Innovations 2015 (pp. 255-264). Springer, Cham.

[48]. Boban Joksimoski , Ivan Chorbev, Katerina Zdravkova, Dragan Mihajlov, Toward 3D Avatar Visualization of Macedonian Sign Language, ICT Innovations 2015, Volume 399 of the series Advances in Intelligent Systems and Computing pp 195-203, Springer

[49]. Nikolovski, V., Lameski, P. and Chorbev, I., 2015. Cloud Based Patient Monitoring Platform Using Android Smartphone Sensors. Cybernetics and Information Technologies, 15(7), pp.109-119.

[50]. M. A. Trpkovska, L. Abazi-Bexheti, B. Cico, D. Stanojevic and I. Chorbev, "Quantitative research on using social networking site www.emama.mk as online community for health purposes," 2015 4th Mediterranean Conference on Embedded Computing (MECO), Budva, 2015, pp. 432-435.

[51]. Elena Markoska, Ivan Chorbev, Sasko Ristov, Marjan Gusev, Cloud portability standardization overview, 38th International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO), 2015 38th International Convention on. IEEE , May 2015

[52]. Nikolovski, V., Stojanov, R., Mishkovski, I., Chorbev, I. and Madjarov, G., Educational Data Mining: Case Study for Predicting Student Dropout in Higher Education, CIIT, Bitola, Macedonia, 2015

[53]. Aleksandar Stojmenski, Ivan Chorbev, Petar Danilovski, Dejan Konevski, Comparison of protocols and video players for a live video streaming application, Conference: ETAI 2015, At Ohrid, Macedonia

[54]. Marika Apostolova Trpkovska, Ivan Chorbev, Bogoljub Jakovceski, Lejla Abazi. Design and Implementation of Vaccination Reminder System - Solution for Young Mothers. 13th International Conference on e-Society (ES 2015) Madeira Portugal, 14-16 March 2015, pp.260-264, ISBN: 978-989-8533-32-6.

[55]. Salkoski, Rasim, and Ivan Chorbev. "Design optimization of transformer rectifier unit for electrostatic precipitators based on Differential Evolution Algorithms.", XII International Conference ETAI 2015, At Ohrid, Volume: XII

[56]. Chorbev, I. , Davcev, D., Boshnakoska, D. Combined Language Processing Methods and Mash-Up System for Improving Retrieval in Diabetes Related Patents, Multidisciplinary Information Retrieval, 7th Information Retrieval Facility Conference, IRFC 2014, Copenhagen, Denmark, November 10-12, 2014, Proceedings, Springer, 978-3-319-12978-5

[57]. Aleksandar Stojmenski, **Ivan Chorbev**, Boban Joksimoski, Slavco Stojmenski, 3d printing assistive devices, in print Springer, ELEMENT 2014, 6th International Conference on Mobile Networks and Management MONAMI, Wurzburg, Germany, September 2014

[58]. Nikolovski, Vlatko, Petre Lameski, Boban Joksimoski, and **Ivan Chorbev**. "Cloud Based Assistive Technologies and Smart Living Environment System." In Mobile Networks and Management, pp. 358-369. Springer International Publishing, 2014.

[59]. Magdalena Kostoska and Ivan Chorbev and Marjan Gusev, Creating portable TOSCA archive for iKnow University Management System, Proceedings of the 2014 Federated Conference on Computer Science and Information Systems, pages 761—768, IEEE Annals of Computer Science and Information Systems, 2014,

[60]. Salkoski R., Chorbev I.,: Design optimization of power objects based on Constrained non-linear minimization, Genetic algorithms, Particle swarm optimization algorithms and Differential Evolution Algorithms, International Journal on Information Technologies and Security, No. 3, 2014, Sofija, ISSN 1313-8251,pp. 21 – 30

[61]. Marika Apostolova Trpkovska, Betim Cico, Ivan Chorbev. Application of Social media in eHealth. MECO'2014. ISBN 978-1-4799-4826-0. June 15-18 2014, pp: 314-317.9.

[62]. К. Здравкова, и Б. Јоксимоски, и И. Чорбев, и Д. Михајлов, „Петар у облацима образовања," Инфотека, вол. 15, пп. 16-29, Септембар 2014.

[63]. Martin Cvetkovski, Ivan Chorbev, Implementing continuous integration in a web based medical software, ICT Innovations 2014, Ohrid

[64]. Filip Andonovski, Ivan Chorbev, Clustering of tweets from popular athletes, ICT Innovations 2014, Ohrid

[65]. Marika Apostolova Trpkovska, Betim Cico and Ivan Chorbev, Using social media to predict children disease occurrence, Proc. of the 7th IADIS International Conference Information Systems, Madrid, 2014, pages 209-216

[66]. Aleksandar Stojmenski, **Ivan Chorbev**, Dragan Mihajlov, Automated online playlist generation system, ICT Innovations 2013, Ohrid

[67]. Igor Sudijovski, **Ivan Chorbev**, Facebook апликација за информирање за настаните на образовни институции, The 10th Conference for Informatics and Information Technology (CIIT 2013)

[68]. Aleksandar Stojmenski, **Ivan Chorbev**, Dragan Mihajlov, An online playlist management system, The 10th Conference for Informatics and Information Technology (CIIT 2013)

[69]. **I. Chorbev.** B. Joksimoski, D. Mihajlov, SA Tabu Miner: A hybrid heuristic algorithm for rule induction, Journal Intelligent Decision Technologies 06 (2012) 265-271, DOI 10.3233/IDT-2012-0142, IOS Press

[70]. Daniela Boshnakoska, **Ivan Chorbev**, Danco Davcev, Ontology supported patent search architecture with natural language analysis and fuzzy rules, ICT Innovations 2012, Ohrid. Springer proceedings

[71]. Rasim Salkoski, **Ivan Chorbev**, Design optimization of distribution transformers based on Differential Evolution Algorithms, ICT Innovations 2012, Ohrid, Web proceedings

[72]. **Ivan Chorbev**, Marjan Gusev, Dejan Gjorgjevikj, Ana Madevska-Bogdanova, Architecture of an electronic student services system and its implementation, ICT Innovations 2012, Ohrid, Web proceedings

[73]. Riste Marevski, **Ivan Chorbev**, Viktor Todorovski, Using hidden space in optimization of space utilization, ICT Innovations 2012, Ohrid, Web proceedings

[74]. M. Apostolova Trpkovska, I. Chorbev, Study of Social Networks and Their Impact on Patients and Health Care, The proceedings of the 3rd International Conference "Information Systems and Technology Innovations: their application in Economy", Tirana, June 8-9, 2012

[75]. **Ivan Chorbev**, Marjan Gusev, Dejan Gjorgjevikj, Sasko Ristov, User interface agile development and evaluation of the iKnow student services system, The 9th Conference for Informatics and Information Technology (CIIT 2012)

[76]. Dejan Gjorgjevikj, Ana Madevska Bogdanova, **Ivan Chorbev**, Marjan Gusev, Implementation of electronic student services at UKIM, The 9th Conference for Informatics and Information Technology (CIIT 2012)

[77]. **Ivan Chorbev**, Marija Sotirovska and Dragan Mihajlov, Virtual communities for diabetes chronic disease healthcare, International Journal of Telemedicine and Applications, vol. 2011, Article ID 721654, 7 pages, 2011. doi:10.1155/2011/721654.

[78]. Jovica Krstevski, Dragan Mihajlov and **Ivan Chorbev**, Student Data Analysis with RapidMiner, ICT Innovations 2011, Skopje, September 2011

[79]. Ljupco Vangelski, **Ivan Chorbev**, Dragan Mihajlov, Adaptive Anomaly-Based Intrusion Detection System, InfoTech 2011, Gabrovo, Bulgaria, September 2011

[80]. Ljupco Vangelski, **Ivan Chorbev** and Dragan Mihajlov, Establishing A Pattern Of Normal Behavior For Protecting Web Applications, , ETAI 2011, September 2011

[81]. Z. Mandev, S. Loskovska, **I. Chorbev**, Folksonomy And Healthcare Social Networks – Perspectives In Macedonia, CIIT 2011, March 16-18, Molika, Bitola, R. of Macedonia

[82]. Joksimoski Boban, Konevski Dejan, Lazarevski Tomislav, **Chorbev Ivan**: System for Management, Visualization and Maintenance of Infrastructural Resources, 18th Telecommunications Forum, TELFOR 2010, Belgrade, Serbia

[83]. D. Gjorgjevik, G. Madzarov, **I. Chorbev**, M. Angelovski, M. Georgiev and B. Dikovski, ASGRT-Automated report generation system, M. Gusev and P. Mitrevski (Eds.): Communications in Computer and Information Science, Vol. 83, ICT Innovations 2010, pp. 369–376, Springer, ISBN 978-3-642-19324-8

[84]. H. Gjoreski, M. Gams and **I. Chorbev**, 3-Axial Accelerometers Activity Recognition, ICT Innovations 2010 (Editor M. Gusev), Web proceedings, ISSN 1857 6060, pp.50-57

[85]. **I. Chorbev**, B. Joksimoski, D. Mihajlov, SA Tabu Miner - A Hybrid Heuristic Algorithm For Rule Induction, International Conference on Uncertainty and Robustness in Planning and Decision Makingm, University of Coimbra, Portugal, 15-17 April 2010

[86]. V. Todorovski, **I. Chorbev**, S. Loskovska , Overview of the GUHA method as a data mining technique, Conference for Informatics and Information Technology, CIIT2010, Bitola, Macedonia, February 24-27, 2010

[87]. G. Cvetkoski, **I. Chorbev**, Application of the GUHA method in medical diagnosis Conference for Informatics and Information Technology, CIIT2010, Bitola, Macedonia, February 24-27, 2010

[88]. **Chorbev I.**, Joksimovski B., An Integrated System for E-Medicine (e-health, telemedicine and medical expert systems), Ubiquitous Health and Medical Informatics: Advancements in Web 2.0, Health 2.0 and Medicine 2.0, IGI Global (formerly Idea Group Inc.), invited book chapter, April/May 2010, ISBN 9781615207770, pp.104-126

[89]. I. Dimitrovski, S. Loskovska, **I. Chorbev**: Efficient Content-based Image Retrieval using Support Vector Machines for Feature Aggregation. Innovations in Computing Sciences and Software Engineering, Proceedings of the 2009 International Conference on Systems, Computing Sciences and Software Engineering (SCSS), pp. 319-324, Bridgeport, CT, USA, December 4-12, Springer 2009

[90]. **Chorbev I.**, Mihajlov M., Building a Wireless Telemedicine Network within a WiMax based Networking Infrastructure, IEEE International Workshop on Multimedia Signal Processing - MMSP'09, Rio de Janeiro, Brasil, October 2009, invited paper, ISBN: 978-1-4244-4464-9, IEEE Catalog Number: CFP09MSP-CDR, page(s): 1 - 6

[91]. **I. Chorbev,** M. Andovska, Applying Bagging Techniques on the SA Tabu Miner Rule Induction Algorithm, ICT Innovations 2009, Davcev, Danco; Marx Gómez, Jorge (Eds.), 1st Edition., 2010, XII, 468 p., Hardcover, ISBN: 978-3-642-10780-1, pp 75-85

[92]. B. Joksimoski, **I. Chorbev**, S. Loskovska. An Application for Maintaining Optical Networks, ICT Innovations, September 2009,

[93]. V. Aleksov, **I. Chorbev**, D. Mihajlov, Using Web Servces in mobile medical applications, ETAI 2009, Ohrid, R. of Macedonia, ISBN 978-9989-2175-4-8, page 153

[94]. G. Cvetkoski, **I. Chorbev**, D. Mihajlov, Disease Diagnosis Web Application, ETAI 2009, Ohrid, R. of Macedonia, ISBN 978-9989-2175-4-8, page 97, in Macedonian

[95]. Madzarov G., Gjorgjevikj D., **Chorbev I.**, A Multi-class SVM classifier utilizing binary decision tree, Informatica - An International Journal of Computing and Informatics, Ljubljana, Slovenia, June 2009, Vol 33, Number 2, ISSN 0350-5596 p.233-242.

[96]. **Chorbev I.**, Madzarov G., Mihajlov D., Wireless Telemedicine as Part of an Integrated System for E-Medicine, IEEE Student paper, http://standardseducation.org.

[97]. **Chorbev I.**, Mihajlov D., Jolevski I., Web Based Medical Expert System with a Self Training Heuristic Rule Induction Algorithm, Proc. of The First International Conference on Advances in Databases, Knowledge, and Data Applications, DBKDA 2009, Cancun, Mexico, March 2009, page 143-148.

[98]. **Chorbev I.**, Loskovska S, Dimitrovski I. Mihajlov D., Solving the High School Scheduling Problem Modelled with Constraints Satisfaction using Hybrid Heuristic Algorithms, book Greedy Algorithms, Publisher: IN-TECH, ISBN 978-953-7619-27-5, November 2008. pp. 529-553

[99]. G. Madzarov, D. Gjorgjevikj, **I. Chorbev**, "Multi-class Classification using Support Vector Machines in Binary Tree Architecture", International Scientific Conference UNITECH'08 Gabrovo, Proceedings Volume-I, ISSN 1313-230X, pp.413-418, 21-22 November, Bulgaria, 2008.

[100]. **Chorbev I.**, Mihajlov D., Madzarov G., Rule Induction In Medical Data With Hybrid Heuristic Algorithms, Information Society 2008, 11th International multiconference, 13 – 17, Ljubljana, Slovenia, October 2008, pages 57-61.

[101]. **Chorbev I.**, M. Mihajlov, I. Jolevski, WiMAX Supported Telemedicine as Part of an Integrated System for E-Medicine, 30th International Conference on Information Technology Interfaces, Cavtat, Croatia, June 2008, pages 589-594.

[102]. Cvetkoski G., **Chorbev I.**, Mihajlov D., Web Based PDA Enabled Medical Information System, Cavtat, Croatia, June 2008, pp.

[103]. **Chorbev I.**, M. Mihajlov, Wireless Telemedicine Services as part of an Integrated System for E-Medicine, IEEE MELECON2008, The 14th IEEE Mediterranean Electrotechnical Conference, Ajaccio (France), May 2008, pages 264-269.

[104]. **Chorbev I.**, D. Mihajlov, Integrated system for e-medicine in a developing information society, Information Society 2007, 10. International multiconference, Ljubljana, Slovenija, October 2007, page 15.

[105]. Ж. Лозаноски, **И. Чорбев**, Д. Михајлов, Тестирање на java апликации со junit и предикција на грешки со баесови мрежи, ЕТАИ 2007, Охрид, Македонија.

[106]. Jovanoski I., **Chorbev I.**, Mihajlov D., Dimitrovski I., Tabu Search Parameterization and Implementation in A Constraint Programming Library, IEEE Region 8 Eurocon 2007 Conference, Warsaw, Poland, 2007, pages 459-464.

[107]. **Chorbev I.**, Dimitrovski, D. Mihajlov, S. Loskovska, Hybrid Heuristics for Solving the Constraints Modeled High School Scheduling Problem, IEEE Region 8 Eurocon 2007 Conference, Warsaw, Poland, 2007, pages 2242-2247.

[108]. I. Dimitrovski, S. Loskovska, **I. Chorbev** and G. Kakasevski, Video Content-Based Retrieval System, IEEE Region 8 Eurocon 2007 Conference, Warsaw, Poland, pages 978 – 983.

[109]. I. Dimitrovski, S. Loskovska, **I. Chorbev**, D. Mihajlov, "Improved Shot Boundary Detection Algorithm", Information Society – IS 2006, 9-14. Oct., 2006, Ljubljana, Slovenia, 18-21.

[110]. E. Ikonomovska, **I. Chorbev**, D. Gjorgjevik, D. Mihajlov, The Adaptive Tabu Search and Its Application to the Quadratic Assignment Problem, IS2006, Ljubljana, Slovenija, 2006, pages 27-30.

[111]. **I. Chorbev**, I. Dimitrovski, S. Loskovska, D. Mihajlov, A parallel implementation of simulated annealing with a Бoltzmann synchronization function and its application to solve the traveling salesman problem, IS2006, Ljubljana, Slovenija, pages 14-17.

[112]. **I. Chorbev**, S. Loskovska, I. Jolevski, D. Mihajlov, Heuristic approaches and decisions in temporal and spatial scheduling using a Constraint Solving Engine, ITI2006 Cavtat, Croatia, 2006.

[113]. Jolevski I., Loskovska S., **Chorbev I.**, Mihajlov D., Murgovski N., Constraints Modeling of the High School Scheduling Problem, Eurocon 2005, Belgrade, Serbia and Montenegro, 2005, pages 748-751.

[114]. И. Јолевски, С. Лошковска, Н. Мурговски, Д. Михајлов, **И. Чорбев**, Развој на кориснички интерфејс за апликација за Распоред на часови и негова оптимизација, ЕТАИ, Охрид, Р. Македонија, 2005.

[115]. Jolevski I., Loskovska S., **Chorbev I.**, Mihajlov D., A Solution of N Queen Problem using a Constraint Solving Engine with Multiple Optimization Algorithms, ETAI, Ohrid, R.of Macedonia, 2005, pages I56-I61.

[116]. Jolevski I., Loskovska S., **Chorbev I.**, D.Mihajlov. An Overview of a Constraint Solving Engine with Multiple Optimization Algorithms, ITI2005 Cavtat, Croatia, pages 637-643.

Research and teaching

At the university I teach: Basics of Web Design, Advanced Web Design, Structured programming, Object-oriented programming, Programming practices (Implementation of Open Source Systems), System Integration in undergraduate studies and Software reliability, Development of Integrated Systems, Multimedia and Scalable Web, Educational Data Analysis in Post-graduate studies. Previously I have taught Applicative software, Computer Graphics, Computer Animation.

My research efforts have included heuristic optimization algorithms used in combinatorial optimization. I developed a constraint programming library later used for solving scheduling problems. I worked on unit testing of software with Java (JUnit) and C++ (Cantata) and bugs estimation with Bayesian networks. My research area during and after the PhD studies is e-medicine, application of heuristic algorithms in medicine, classification rules induction, knowledge discovery, machine learning, medical data mining, telemedicine, medical information and multimedia systems, machine translation, information retrieval, assistive technologies, software engineering etc.