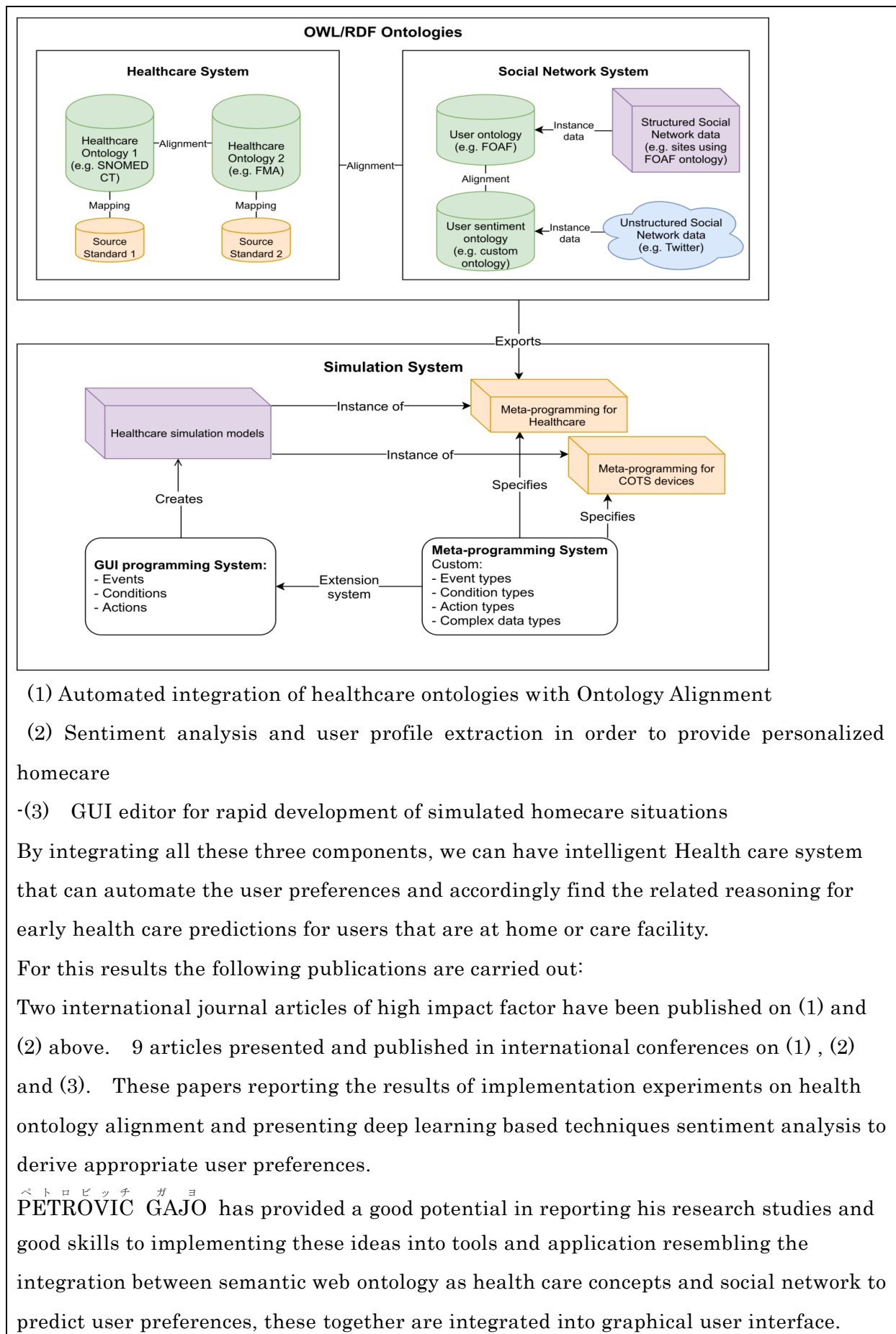


様式 3

論文審査の結果の要旨	
氏 名	フリガナ ペトロビッチ ガヨ PETROVIC GAJO
学位の種類	博士（ソフトウェア情報学）
学位記番号	甲第 49 号
学位授与年月日	平成 30 年 3 月 22 日
学位授与の根拠	岩手県立大学学位規則第 3 条第 3 項（論文博士の場合は第 3 条第 4 項）
学位論文題目	ヘルスケア予測システムにおけるソーシャルネットワーク解析と セマンティック Web オントロジーアラインメント
論文審査委員	主査 藤田 ハミド 副査 佐々木 淳、布川 博士
審査結果の要旨	
<p>ペトロビッチ ガヨ PETROVIC GAJO 氏の学位請求論文の要旨および審査委員 3 人の本論文に対する評価及び審査結果の要旨は 以下の通りである。</p> <p>A system for elderly homecare is proposed in this thesis, along with research contributions in three relevant areas: Ontology alignment, Social Network Analysis and GUI scenario programming. There are two main issues in healthcare that have been addressed:</p> <ul style="list-style-type: none"><li>- (1) Developed countries have increasingly high numbers of elderly people that require constant supervision and monitoring.</li><li>- (2) There are many different, incompatible healthcare standards and systems, and manual integration is costly and error-prone.</li></ul> <p>To solve these two problems, the following solutions are presented as abstracted in the below figure:</p>	



Case studies are examined based on a survey to test the usability of such tool through feedback practices of some user employing the tool for testing. The results exhibited reflect the good outcome of the work as potential solution for health care prediction. Based on the total outcome reflected in the results, the related publications and also the ペトロビッチ ガヨ PETROVIC GAJO presentation and answers to the questions from the committee members we concluded that he passed the thesis examination with success.

#### International Journals Articles:

[1] G. Petrović and H. Fujita, "SoNeR: Social Network Ranker," *Neurocomputing*, vol. 202, pp. 104–107, Aug. 2016. (impact factor 3.317)

<https://www.sciencedirect.com/science/article/pii/S0925231215014800>

[2] G. Petrovic and H. Fujita, "SpringBoard: game-agnostic tool for scenario editing with meta-programming support," *Applied Intelligence Journal (Springer)* Oct. 2017 (appeared online), and as hard copy: on May 2018, Volume 48, Issue 5, pp 1161~1175 (Impact Factor 1.904) <https://link.springer.com/article/10.1007/s10489-017-1069-y>

#### Referred International Conferences

[3] Gajo Petrovic, Hamido Fujita, "Effect of relationships in Social Networks on calculating user sentiment profiles," *Frontiers in Artificial Intelligence and Applications*, Volume 276: New Trends on System Sciences and Engineering, pp7-24, 2015 DOI: 10.3233/978-1-61499-522-7-17.

<http://ebooks.iospress.nl/volumearticle/39572>

[4] Gajo Petrovic, Hamido Fujita "Semi-automatic Detection of Sentiment Hashtags in Social Networks", *International Conference on Intelligent Software Methodologies, Tools, and Techniques SoMeT 2015: Intelligent Software Methodologies, Tools and Techniques* pp 216-224, *Communications in Computer and Information Science* Springer book series (CCIS, volume 532),

[https://link.springer.com/chapter/10.1007/978-3-319-22689-7\\_16](https://link.springer.com/chapter/10.1007/978-3-319-22689-7_16)

[5] Gajo Petrović; Vladimir Dimitrieski; Hamido Fujita, "Cloud-based health monitoring system based on Commercial Off-The-Shelf hardware" *IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, DOI: 10.1109/SMC.2016.7844811, October 9-12, 2016,

<http://ieeexplore.ieee.org/document/7844811/>

[6] Gajo Petrović, Vladimir Dimitrieski, Hamido Fujita, "A Deep Learning Approach for Searching Cloud-Hosted Software Projects" pp. 58 - 368, 2016

DOI10.3233/978-1-61499-674-3-358 Series Frontiers in Artificial Intelligence and Applications, Volume 286: New Trends in Software Methodologies, Tools and Techniques, <http://www.ebooks.iospress.com/volumearticle/44458>

[7] Vladimir Dimitrieski, Gajo Petrović, Aleksandar Kovačević, Ivan Luković, Hamido Fujita, "A Survey on Ontologies and Ontology Alignment Approaches in Healthcare", International Conference on Industrial, Engineering and Other Applications of Applied Intelligent Systems, IEA/AIE 2016: Trends in Applied Knowledge-Based Systems and Data Science pp 373-385, Lecture Notes in Computer Science book series (LNCS, volume 9799), July 2016  
[https://link.springer.com/chapter/10.1007/978-3-319-42007-3\\_32](https://link.springer.com/chapter/10.1007/978-3-319-42007-3_32)

[8] Gajo Petrović, Hamido Fujita, "Deep Correct: Deep Learning Color Correction for Color Blindness", 824 - 834, 2017, DOI10.3233/978-1-61499-800-6-824 Series Frontiers in Artificial Intelligence and Applications, Volume 297, 2017 : New Trends in Intelligent Software Methodologies, Tools and Techniques,  
<http://ebooks.iospress.nl/volumearticle/47619>

以上のことを勘案して審査員 3 人の合議による最終結論は、本論文の提出者が自立して研究活動を行い、またはその他の高度な専門的業務に従事するために必要な能力およびその基礎となる豊かな学識を有していることを示すものであると判断した。よって、本学位請求論文は「博士（ソフトウェア情報学）」の授与に値する論文であると全員一致で認めた。