

Entrepreneurial and problem solving skills in software engineers

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Problem solving and creativity are very valued skills for leadership and new entrepreneurs related to software development and technology companies (Dyer, Gregersen, & Christensen, 2011; IBM, 2010).

Higher education institutions and corporation usually live in different worlds, academic and business seem do not understand each other. However, the future professionals, who are being prepared in the universities all over the world, need to be in contact and know the real problems that arise in the corporations and in the current society. This is especially important in engineering related jobs.

Virtual Alliances for Learning Society (VALS) European project (García-Peñalvo et al., 2013; García-Peñalvo, Cruz-Benito, Conde, & Griffiths, 2014, 2015; García-Peñalvo, Cruz-Benito, Griffiths, & Achilleos, 2015; García-Peñalvo, Cruz-Benito, Griffiths, et al., 2014) is an interesting example of how universities and companies may collaborate to resolve real business problems through open innovation (García-Peñalvo, García de Figuerola, & Merlo, 2010) mediated by the use of Open Source Software (European Commission Directorate-General for Informatics (DIGIT), 2011).

Within this crisis moment and also due to the maturity of the use of the technology for teleworking, VALS has defined virtual placements in order to facilitate the students of Software Engineering degrees having access to business all over the world without any cost derived to leave their homes during their studies.

The innovative approach is to leverage virtual in companies in order to foster entrepreneurial, problem solving and creativity skills and attitudes. This result in the Semester of Code methodology and pilots, a sustainable set of methods and processes for creating and managing virtual placements, and for integrating these into innovative teaching and learning strategies.

The Semester of Code allows students addressing real business problems raised by companies and Open Software Foundations, and get rewards from resolving them reflecting it in their formal education.

However, as any new innovation, the adoption and acceptance of this VALS approach has not been easy (García-Peñalvo, 2014). Universities have their own schedules and administrative procedures, which are not the same for all the universities and differ a lot from the timing in the companies. Students find very interesting VALS approach, but except the early adopters, they need more time and knowing previous experiences in order to assimilate the opportunity and be ready to introduce it in their planning.

Nevertheless, this kind of initiatives are needed to reduce the gap between University and Business and obtain better professional qualification under equal opportunities in a time of crisis. This is a mandatory fact for our current society in which very complex problems need to be solved as the ones we present in this new issue of *Journal of Information Technology Research*.

Hewahi and Alashqar (2015) focus their work, entitled “Wrapper Feature Selection Based on Genetic Algorithm for Recognizing Objects from Satellite Imagery” on applying genetic algorithms with a correlation ranking filter wrapper to eliminate unimportant features and obtain better features set that can show better results with various classifiers such as neural networks (NN), K-nearest neighbor, and decision trees in order to recognize object specific geospatial features, such as roads, buildings and rivers, from high-resolution satellite imagery.

The paper “Role of Karaka relations in Hindi Word Sense Disambiguation” by Satyendr Singh and Tanveer J. Siddiqui (2015) investigates the role of karaka relations in Hindi word sense disambiguation. They propose two supervised algorithms for disambiguation. The first algorithm is based on conditional probability of co-occurring words and the second algorithm is Naïve Bayes classifier.

Zhao et al. (2015) analyze the type of mini-type antenna, studying the miniaturization technique based on simulation in depth, and finally designing the high-performance micro-strip antenna.

Beloudane and Belalem (2015) paper, entitled “Towards an Efficient Management of Mobile Cloud Computing Services based on Multi Agent Systems”, discusses their approach on mobile cloud computing environment. Authors propose a dynamic, efficient and equilibrated model based on multi-agent system and Top-K technology.

The last paper by Golshan Assadat Afzali Boroujeni and Seyed Alireza Hashemi Golpayegani (2015) entitled “Improving Context Aware Recommendation Performance by Using Social Networks” proposes a new model for recommender systems that is based on mobile data. This model uses these data to extract current users` context and also to identify individuals with the highest influence in a social network.

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