Curriculum Vitae

Svitlana Moiseyenko, M.Sci.

Affiliation, Contact, and Links

Profiles:
Personal Web Site: svitlanamoiseyenko.com
LinkedIn Profile: S.Moiseyenko
ResearchGate Profile: Svitlana Moiseyenko
Google Scholar Profile: S.Moiseyenko
ORCID: 0000-0001-5451-6350

Affiliation(s) and Position(s):
Faculty of Applied Sciences, Ukrainian Catholic University, Lviv, Ukraine
PhD Student, 1th year

Languages: **English** (good spoken and written), **Ukrainian** (native)

Brief Biography

Svitlana Moiseyenko graduated from Computer Academy Step in Software Development in 2009. In 2017 she received M.Sci in Computer Science and Information Technologies at Zaporizhzhia National University. The title of her M.Sci thesis was "An approach for text parsing and UML models generation". In 2017 she has been enrolled for the Ph.D. program in Computer Science at the Dept. of Computer Science of Zaporizhzhia National University. In 2023 she has been enrolled for the Ph.D. program in Intelligent Systems at the Faculty of Applied Sciences, Ukrainian Catholic University. Her mentor is Prof. Vadim Ermolayev (http://ermolayev.com/).

From 2009 she had worked at various positions (software engineer, senior engineer, consultant and project architect) in different development and consulting projects, e.g.: business software applications (including podcast, video, human network of problem solvers), art application for festivals and museums (IDFA Doc Lab, MOMA, AFI Docs, Sotheby's), five-week class application at Teachers College (Columbia University) and applications for Australian Medical Centre. In 2019 she become a software engineer at Qroma, where she applies Natural Language Tagging approach to process and publish scanned photos. Pomicell uses Deep-learning AI to accelerate predicting the optimal treatments for every patient by analyzing of data sources. Primark.

Svitlana contributes to public some software libraries, developed and owned by herself, via open source initiative since 2015.

Research Interests

Relation Extraction, Concept Extraction, Semantic Context, Ontology Engineering, Knowledge Graph, Deep Learning.

Software Engineering Experience (Selected)

2022 – 2023: **software engineer at Primark**. Responsible for checkout system implementation. Monitoring and implementation solutions for performance optimisation (computation and demand management).
2021 – 2022: **software engineer at Pomicell**. Predicting the optimal treatments for every patient by analyzing of data sources.

2020 – 2021: **full stack developer at Electafile**. Campaign Finance Filing System designed for the North Carolina State Board of Elections (NCSBE). Responsible for planning, architecture and feature delivery front-end and back-end sides.
2020 - on: **software engineer at SC Medical**. Responsible for leading business management software at SCMDS. SCMDS is targeted full client management, accounts, stock, equipment management, and inspection management. Additionally, it incorporates routine testing of equipment within Australian Medical Hospitals.

2019 - 2020: **software engineer at Qroma.** Use of NLP (tagging) to process and publish scanned photos.
2017 - 2019: **software engineer at Pitch.** (Video live streaming (WebRTC), blockchain, smart contracts).
2016 – 2019: **full stack software developer and project architect at SC Medical**. Development of intelligent Trakkers system continually monitors the performance of the infrastructure and network (by scanning the information using Bluetooth Low Energy beacons) in order to send notifications to medical service personnel. Development software for managing BLe controllers.
2016 – 2018: **architecting and developing AR/VR applications at Raycaster Studio.** (Project architecture solutions, platform-specific performance optimization, working with object recognition implementation using OpenCV framework possibilities).
2015 – 2016: **development own UI libraries:** ASSliderSegmentControl, ASAutoResizingTextView. Contribution into the open source frameworks related to image recognition using ML techniques.
2007 – 2015: **desktop and mobile software development for several US, EU and Japan organizations**. (Experience in developing graphic drawing applications, audio/video streams management, data synchronization, etc)

My PhD Project

The proposal of my PhD Project is “Learning Concepts and Semantic Contexts from Domain Text Corpora and Terminologies”. The objective is to research and develop a domain-agnostic processing pipeline that constructs semantic contexts for ontology concepts. This entails completing concept models in the form of sub-graphs based on the schema of the ontology being developed. This includes the development of the methods, techniques, and software tools focused on extracting learning concepts and semantic contexts from domain-specific text corpora and terminologies.
As a result, this is envisioned as a solution derived from term extraction. This solution facilitates the identification of term definitions, the extraction of relationships from them, and subsequently aids in constructing learning concepts and establishing semantic contexts

Education

2023 - ongoing: **Ph.D., Ukrainian Catholic University**, Computer Sciences, PhD Programme in “Intelligent Systems”
2017 - 2023: **Ph.D., Zaporizhzhia National University,** Computer Sciences
2015 - 2017: **M.Sci., Zaporizhzhia National University**, Computer Sciences and Information Technologies, Mathematician-Programmer, Teacher of Computer Science (with honours)
2007 - 2009: **Diploma, IT Academy Step**, Software Development (with honours)

Other Relevant Experience

Speaking at Conferences / Workshops / Symposia:
Conceptualizing and Formalizing Requirements for Ontology Engineering. 14th Int Conf. ICTERI 2018 PhD Symopsium, Kyiv (Ukraine), May 2018

Building a Feature Taxonomy of the Terms Extracted from a Text Collection. Masters Symposium on Advances in Data Mining, Machine Learning, and Computer Vision (MS-AMLV 2019), Lviv (Ukraine), May 2018

Work for Industry:
2019 - ongoing: Software developer at Qroma. Use of NLP (tagging) to process and publish scanned photos
M.Sci. Diploma:
Title: Software development for parsing texts and UML models generation.
Work done: Use of Stanford Core NLP for developing an Ontology editor. Development of specific rules and approaches for processing natural language (English) texts to generate UML models

Certifications

Cisco, Stanford Machine Learning, Neural Network and Deep Learning, Data Science Math Skills, Algorithms: Design and Analysis, Cryptography and more.

Publications … so far:

1. Moiseyenko, S., Ermolayev, V.: Conceptualizing and formalizing requirements for ontology engineering. In: Antoniou, G., Zholtkevych, G. (eds.) Proc. ICTERI 2018 PhD Symposium, CEUR-WS, vol. 2122, http://ceur-ws.org/Vol-2122/paper_141.pdf
1. Moiseyenko, S., Vasileyko, A., Ermolayev, V.: Building a Feature Taxonomy of the Terms Extracted from a Text Collection. In: Vadim Ermolayev, V., Molchanovsky, O., Prytula, Y. (eds.) Proc. of the Masters Symposium on Advances in Data Mining, Machine Learning, and Computer Vision, http://ceur-ws.org/Vol-2566/MS-AMLV-2019-paper13-p059.pdf