# **CURICULUM VITAE**



Sylvia Vassileva

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#### **EDUCATION**

# PhD in Computer Science

Mar 2023 – expected Mar 2026

Sofia University St. Kliment Ohridski

Dissertation Title: Methods for automatic recognition and linking of concepts in

medical and specialized texts

Advisors: Prof. Ivan Koychev, Prof. Svetla Boytcheva

MSc in Artificial Intelligence

Oct 2019 – Feb 2022

Sofia University St. Kliment Ohridski

BSc in Informatics

Oct 2004 - Jul 2008

Sofia University St. Kliment Ohridski

#### **RESEARCH INTERESTS**

NLP, Information extraction from clinical texts, Multi-lingual information extraction, Low-resource languages NLP.

# **RESEARCH EXPERIENCE**

## Junior Researcher (part-time)

Apr 2023 – present

Sofia University St. Kliment Ohridski

- Working as part of the SUMMIT Intelligent Systems group
- Developing methods for information extraction from clinical texts in different languages, including English, Spanish and Bulgarian

### **PUBLICATIONS**

- Vassileva, S., Grazhdanski, G., Boytcheva, S. and Koychev, Ivan. Fusion @ BioASQ MedProcNER: Transformer-based Approach for Procedure Recognition and Linking in Spanish Clinical Text Notebook for the BioASQ Lab at CLEF 2023, 2023. CEUR Workshop Proceedings, volume 3497, 190 – 205.
- Vassileva, S., Grazhdanski, G., Boytcheva, S. and Koytchev, Ivan. FMI-SU at SemEval-2023 Task 7: Two-level Entailment Classification of Clinical Trials Enhanced by Contextual Data Augmentation, 2023. 17th International Workshop on Semantic Evaluation, SemEval 2023 - Proceedings of the Workshop, 1454 – 1462.
- 3. **Vassileva, S.**, Boytcheva, S., and Koychev, Ivan. Tool for Automatic Annotation of Clinical Texts in Bulgarian BGMedAnno, Information Systems & Grid Technologies: Fifteenth International Conference ISGT'2022. 2022.

- 4. Velichkov, B., Velchev, G., Panayotov, P., Gerginov, S., **Vassileva, S.**, Koychev, I., Boytcheva, S.. Cascading Approach for Automatic ICD-10 Codes Association to Diseases in Bulgarian. Contemporary Methods in Bioinformatics and Biomedicine and Their Applications, 374, BioInfoMed 2022, LNNS, Springer Nature, 2022, ISSN:23673370, DOI:10.1007/978-3-030-96638-6\_27, 27.
- 5. Velichkov, B., **Vassileva**, **S.**, Gerginov, S., Kraychev, B., Ivanov, I., Ivanov, P., Boytcheva, S.. Comparative Analysis of Fine-tuned Deep Learning Language Models for ICD-10 classification task for Bulgarian Language. RANLP 2021, INCOMA Ltd., 2021, DOI:10.26615/978-954-452-072-4\_163, 1452-1458.
- 6. **Vassileva, S.,** Todorova, G., Ivanova, K., Velichkov, B., Koychev, I., Angelova, G., Boytcheva, S., Automatic Transformation of Clinical Narratives into Structured Format. Proceedings of the Student Research Workshop, RANLP 2021, INCOMA Ltd., 2021, DOI:10.26615/issn.2603-2821.2021\_030, 219-227.
- 7. Velichkov, B., Gerginov, S., Panayotov, P., **Vassileva, S.**, Velchev, G., Koychev, I., Boytcheva, S.. Automatic ICD-10 codes association to diagnosis: Bulgarian case. In Proc. of CSBio '20: Proceedings of the Eleventh International Conference on Computational Systems-Biology and Bioinformatics, Bangkok, Thailand, 19-21 November 2020, ACM Digital Library, 2020, ISBN:978-1-4503-8823-8/20/11, DOI:10.1145/3429210.3429224, 46-53.

#### **CONFERENCE PRESENTATIONS**

- 1. **Vassileva, S.**, Grazhdanski, G., Boytcheva, S. and Koychev, Ivan. Fusion @ BioASQ MedProcNER: Transformer-based Approach for Procedure Recognition and Linking in Spanish Clinical Text Notebook for the BioASQ Lab at CLEF 2023. Thesalloniki, Greece.
- 2. **Vassileva, S.**, Boytcheva, S., Grazhdanski, G. and Koytchev, Ivan. FMI-SU at SemEval-2023 Task 7: Two-level Entailment Classification of Clinical Trials Enhanced by Contextual Data Augmentation poster. 17th International Workshop on Semantic Evaluation, SemEval 2023. Toronto, Canada.
- 3. **Vassileva**, **S.**, Boytcheva, S., and Koychev, Ivan. Tool for Automatic Annotation of Clinical Texts in Bulgarian BGMedAnno, Information Systems & Grid Technologies: Fifteenth International Conference ISGT'2022. Sofia, Bulgaria.
- 4. **Vassileva, S.,** Todorova, G., Ivanova, K., Velichkov, B., Koychev, I., Angelova, G., Boytcheva, S. Automatic Transformation of Clinical Narratives into Structured Format. Student Research Workshop, RANLP 2021. Online.

# PROFESSIONAL EXPERIENCE

# Architect - Technical, Enterprise, Senior Enterprise

Nov 2016 – present

Mentormate

- Solution and technical architecture design of custom software projects and third-party system integrations
- Cloud infrastructure architecture Azure, AWS

## **Software Development Manager**

Jan 2016 – Jan 2018

Mentormate

 Managing a team to ensure successful project delivery and individual career development

.NET Developer, Senior .NET Developer, Team Lead

Jan 2011 - Dec 2015

Mentormate

Developing custom software using Microsoft technologies

**Founder** May 2008 – Jan 2011

Storm Airsoft Ltd.

• Hobbyist business for importing airsoft equipment and accessories

## .NET Developer

Jul 2006 – Jun 2008

WizeFish Ltd.

• Developing custom software using Microsoft technologies

# **TECHNICAL SKILLS**

.NET, Azure, AWS, Infrastructure as code, Microservices and Serverless architecture, Domain-driven design.

## **LANGUAGES**

Bulgarian - native, English – proficient.