Anamaria Briciu

Nationality: Romanian   **Date of birth:** 15/08/1993   ✉ **Email address:** anamaria.briciu15@gmail.com

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Home: (Romania)

WORK EXPERIENCE

University research assistant
Babeș-Bolyai University, Faculty of Mathematics and Computer Science [27/02/2023 – Current]

City: Cluj-Napoca

Research within the areas of interest, mainly *natural language processing*, ongoing involvement in research projects and in writing new project proposals.

University research assistant
Babeș-Bolyai University, Faculty of Mathematics and Computer Science [01/03/2021 – 31/12/2023]

City: Cluj-Napoca
Country: Romania

Research on the QuaDeeP (*Enhancing the quality of software systems using deep learning models for defects prediction and detection*) project, which focuses on developing deep learning techniques for software defect prediction, a problem of major relevance within software engineering. Particular research area involves the investigation of natural language processing techniques in software engineering tasks.

University research assistant
Babeș-Bolyai University, Faculty of Mathematics and Computer Science [06/2022 – 12/2022]

City: Cluj-Napoca

Exploratory research on the *AI-leveraged Enterprise Agility* project developed within the partnership between the Faculty of Mathematics and Computer Science, Babeș-Bolyai University Cluj-Napoca and the NATO HUMINT Centre of Excellence. The main research work concerned the investigation of the applicability of existing machine learning and deep learning models to specific tasks of information extraction from textual documents.

University research assistant
Babeș-Bolyai University, Faculty of Mathematics and Computer Science [06/04/2023 – 15/12/2023]

City: Cluj-Napoca
Country: Romania

Experimental development of an innovative software product for the analysis of sentiment in Romanian-language texts within the *SENTITEXT* project. Main activities included comprehensive documentation with respect to sentiment analysis approaches, writing programs to fulfill certain tasks (e.g. creation of a Romanian dictionary from an online source), research on the applicability of existing machine learning and deep learning methods for sentiment analysis of Romanian language texts.

Ph.D. student
Babeș-Bolyai University, Faculty of Mathematics and Computer Science [2019 – 2022]

City: Cluj-Napoca
Country: Romania

Research area is the field of natural language processing, with a special interest in deep-learning-driven applications for Romanian text.

Junior Software Consultant
MHP Romania [09/2015 – 10/2015]

City: Cluj-Napoca
Country: Romania

Participated in a training program that covered Java programming basics.

Perl Intern
Evozon [07/2015 – 08/2015]

City: Cluj-Napoca
Country: Romania

Learned basics of a new programming language (Perl). Acquired knowledge about Agile software development, and SCRUM principles, respectively. Worked on an appointment management project.

Web Development Intern
Freshbyte [09/2013 – 10/2013]

City: Cluj-Napoca
Country: Romania

Developed a blog and an online shopping website using technologies such as PHP, MySQL, HTML/CSS, Javascript and Git.

EDUCATION AND TRAINING

Doctoral studies
Babes-Bolyai University, Faculty of Mathematics and Computer Science [2019 – 2022]

City: Cluj-Napoca
Country: Romania

Master's Degree in Applied Computational Intelligence
Babes-Bolyai University, Faculty of Mathematics and Computer Science [2016 – 2018]

City: Cluj-Napoca
Country: Romania

Bachelor of Computer Science
Babes-Bolyai University, Faculty of Mathematics and Computer Science [2012 – 2015]

City: Cluj-Napoca
Country: Romania

Baccalaureate Diploma
"Nicolae Bălcescu" High School, Cluj-Napoca, Romania [2008 – 2012]

City: Cluj-Napoca
Country: Romania

LANGUAGE SKILLS

Mother tongue(s): **Romanian**

Other language(s):

English	Spanish
LISTENING C2 **READING** C2 **WRITING** C2	**LISTENING** B2 **READING** B2 **WRITING** B2
SPOKEN PRODUCTION C2 **SPOKEN INTERACTION** C2	**SPOKEN PRODUCTION** B2 **SPOKEN INTERACTION** B2

PUBLICATIONS

Formal Concept Analysis of a Romanian emotion lexicon

[2017]

Mihaiela Lupea and Anamaria Briciu. *Formal Concept Analysis of a Romanian emotion lexicon,* 2017 13th IEEE International Conference on Intelligent Computer Communication and Processing (ICCP), pp. 111-118, 2017.

RoEmoLex - A Romanian Emotion Lexicon.

[2017]

Anamaria Briciu and Mihaiela Lupea. *RoEmoLex - A Romanian Emotion Lexicon*. Studia Universitatis Babeș-Bolyai Informatica, v. 62, n. 2, pp. 45-56, 2017.

Studying the language of mental illness in Romanian social media

[2018]

Anamaria Briciu and Mihaiela Lupea. *Studying the language of mental illness in Romanian social media.* 2018 14th International Conference on Intelligent Computer Communication and Processing (ICCP), pp. 21-28, 2018.

Studying emotions in Romanian words using formal concept analysis

[2019]

Mihaiela Lupea and Anamaria Briciu. *Studying emotions in Romanian words using formal concept analysis.* Computer Speech & Language, v. 57, pp. 128-145, 2019.

Quantitative Analysis of Style in Mihai Eminescu's Poetry

[2019]

Anamaria Briciu. *Quantitative Analysis of Style in Mihai Eminescu's Poetry.* Studia Universitatis Babeș-Bolyai Informatica, v. 64, n. 2, pp. 80-95, 2019.

Emotion-based Hierarchical Clustering of Romanian Poetry

[2021]

Mihaiela Lupea, **Anamaria Briciu** and Elena Bostenaru. *Emotion-based Hierarchical Clustering of Romanian Poetry*. Studies in Informatics and Control, v. 30, n. 1, pp. 109–118, 2021.

A deep autoencoder-based classification model for supervised authorship attribution

[2021]

Anamaria Briciu, Gabriela Czibula and Mihaiela Lupea. *A deep autoencoder-based classification model for supervised authorship attribution*. 25th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2021), September 8-10, 2021, Procedia Computer Science 192, pp. 397-406

Enhancing the performance of software authorship attribution using an ensemble of deep autoencoders

[2022]

Gabriela Czibula, Mihaiela Lupea and **Anamaria Briciu**. *Enhancing the performance of software authorship attribution using an ensemble of deep autoencoders.* Mathematics 2022, v. 10, n. 15: 2572, 2022.

SoftId: An autoencoder-based one-class classification model for software authorship identification

[2022]

Mihaiela Lupea, **Anamaria Briciu**, Istvan Gergely Czibula and Gabriela Czibula. *SoftId: An autoencoder-based one-class classification model for software authorship identification*. 26th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2022), September 7-9, 2022, Procedia Computer Science 207, pp. 716-725.

A study on the relevance of semantic features extracted using BERT-based language models for enhancing the performance of software defect classifiers

[2023]

Anamaria Bricu, Gabriela Czibula and Mihaiela Lupea. *A study on the relevance of semantic features extracted using BERT-based language models for enhancing the performance of software defect classifiers*. 27th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2023), September 6-8, 2023, Procedia Computer Science 225, pp. 1601-1610.

PROJECTS

QuaDeeP - Enhancing the quality of software systems using deep learning models for defects prediction and detection

[2021 – 2023]

Research Assistant

Exploratory research project supported by a grant of the Romanian Ministry of Research, Innovation and Digitization,

CNCS/CCCDI – UEFISCDI, project number PN-III-P4-ID-PCE-2020-0800, within PNCDI III, 1.198.032 RON (2021-2023).

Publications:

1. **Anamaria Briciu**, Gabriela Czibula, Mihaiela Lupea, *AutoAt: A deep autoencoder-based classification model for supervised authorship attribution*, 25th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2021), Procedia Computer Science, Volume 192, 2021, Pages 119-128 https://www.sciencedirect.com/science/article/pii/S1877050921015283 (**B-ranked according to CORE classification, indexed WoS**)
2. Mihaiela Lupea, **Anamaria Briciu**, Istvan-Gergely Czibula, Gabriela Czibula, *SoftId: An autoencoder-based one-class classification model for software authorship identification*, 26th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES2022), Procedia Computer Science, Volume 207, 2022, Pages 716-725 https://www.sciencedirect.com/science/article/pii/S187705092201008 (**B-ranked according to CORE classification, indexed WoS**)
3. Gabriela Czibula, Mihaiela Lupea, **Anamaria Briciu**, *Enhancing the performance of software authorship attribution using an ensemble of deep autoencoders*, Mathematics, Special Issue "Recent Advances in Artificial Intelligence and Machine Learning", 2022, 10(15):2572 https://www.mdpi.com/2227-7390/10/15/2572 (**A-ranked, indexed WoS, 2021 IF=2.592, Q1**)
4. **Anamaria Bricu**, Gabriela Czibula and Mihaiela Lupea. *A study on the relevance of semantic features extracted using BERT-based language models for enhancing the performance of software defect classifiers*. 27th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems (KES 2023), September 6-8, 2023, Procedia Computer Science 225, pp. 1601-1610. (**B-ranked according to CORE classification, indexed WoS**)

SENTITEXT - Produs software inovativ pentru analiza sentimentelor din textele în limba Română
[06/04/2023 – 15/12/2023]

Publications:

1. **Anamaria Briciu**, Alina-Delia Călin, Diana-Lucia Miholca, Cristiana Moroz-Dubenco, Vladiela Petrașcu and George Dascălu. *Machine Learning-based Approaches for Multi-level Sentiment Analysis of Romanian Reviews.* Mathematics, Special Issue "Computational Intelligence and Human–Computer Interaction: Modern Methods and Applications, 2nd Edition", to be submitted December 2023