LANGSOFT - Sprachlernmittel
Switzerland

Langsoft was first registered on 27.05.1994 in canton Graubünden, Switzerland,
Reg. No 1.350.000.133. Re-registered on 09.12.1996 in the same canton,
Reg. No CH-350.1.004.723-3. Last registered on 20.11.2008 in canton St. Gallen,
Switzerland, Reg. No CH-320.1.064.322-3.

Langsoft is a family owned, Natural Language Processing research and development
private business, specialized in Computational Linguistics, Artificial Intelligence -
Automated Reasoning and Natural Language (text) Processing: parsing, spell-
checking (grammatical and orthographical), machine translation, content recognition,
question answering - chatbots, logical inference, text to voice, text to video, text to
voice and video, text summarisation, text attribution, etc. for English, German, French,
Italian.

Natural Language is extremely difficult for programming due to the existing
ambiguities on all levels: orthographical, grammatical, morphological, syntactical,
semantical, pragmatical. To mention just a few: polysemy, metaphors, metonyms,
collocations, co-references, homographs, homophones, etc.

The developer and programmer of the software, Dr. Hristo Georgiev, has found own
solutions to these difficulties and has made these solutions public in a number of
academic publications and software products.

YouTube interview and video with Langsoft at
https://www.youtube.com/watch?si=sGvVmBzYSGYUiutw&v=a4UPEYCHHKo&feature=youtu.be
The hobby of the business owner and NLP, AI software developer Hristo Georgiev is
to study the intelligence of some wild birds. See URL
https://www.linkedin.com/posts/hristo-georgiev-0007841b7_wild-birds-gesture-after-you-to-insist-activity-7180603157725487104-wLJR?utm_source=share&utm_medium=member_desktop

AWARDS

1. Langsoft has been selected as a winner in the annual AI Breakthrough Awards
program for the "**Best Machine Translation Solution**" in 2021.
2. Langsoft - Sprachlernmittel is finalist in the **Edtech company setting a trend**
award for 2022.
https://www.edtechdigest.com/2022-finalists-winners/

PUBLICATIONS
of the owner of Langsoft Hristo Georgiev, PhD

I. Books:

1. „Language Engineering", by Hristo Georgiev, published by The Continuum International
Publishing Group Ltd. London - New York, 2007, ISBN: HB: 0-8264-8294-5 (hardback).

C/C++ foundations of Natural Language Parsing, Grammatical and Orthographical Spell-checking, Machine Translation, Content Recognition, Text Attribution and Text Classification, Question Answering, based on software programs already developed by the author and offered for public download since 1993 .

https://www.bloomsbury.com/au/language-engineering-9780826482945/

2. „English Algorithmic Grammar", by Hristo Georgiev, published by The Continuum International Publishing Group Ltd. London - New York, 2006, ISBN 0-8264-8777-7 (hardback),

The book describes, algorithmically, the Natural Language Parsing and Word Reference method used in the software programs developed by the author. English Natural Language Parser, based on the method described in the book, was released, for public download, in 1993. A few years later were released German and French Natural Language Parsers, offered also for public download up to the present day.

https://www.bloomsbury.com/uk/english-algorithmic-grammar-9781847143358/

3. „*Dictionary of Word Meanings*", by Hristo Georgiev, published by Nova Science, New York, 2010, (Languages & Linguistics Series). ISBN: 1608763919 : 9781608763917

The book offers an Artificial Language for Semantic Description used in the software programs developed by the author.

https://blackwells.co.uk/bookshop/product/Dictionary-of-Word-Meanings-by-Hristo-Georgiev/9781608763917

II. Articles in specialized journals:

1. Informational Measurements of Bulgarian Language, PhD thesis, by Hristo Georgiev, May 1973, Dep. of General Linguistics at the University of St. Petersburg, Russia.

Prediction of words in the sentence, letter by letter, word after word,, based on suggestions of large audience, proving statistically, that 80% of the text is predictable. Large audiences were used to predict the text because that was not possible to do, then, on 24MB - 32MB computers. Now, it is possible and it is known as text generation and Machine Learning.

https://search.rsl.ru/ru/record/01009854933

2. Measuring the Semantical Information of a Text, by Hristo Georgiev, co-authors: Prof. Dr. R G. Piotrowskij, V. Pestunova, V. Bogodist, R. Sijri; in: AUTOMATIC PROCESSING OF TEXTS USING APPLIED LINGUISTICS Avtomaticheskaia Pererabotka Teksta Metodami Prikladnoi Lingvistiki), Kishinev, 1971, pp.261-263 (summary of a report at the Conference), published in Russian.

3. Probability forecast of speech behaviour `(entropy and redundancy)`, by Hristo Georgiev, in:BULGARIAN LANGUAGE, in the journal Bulgarski Ezik, XXI, book 6, 1971, pp.533-537, Sofia, published in Bulgarian.

4. Measuring of Meaning Information, by Hristo Georgiev, co-authors: Prof. Dr. R.G. Piotrowskij, Pestunova, V. Bogodist, R. Sijri; in: SPECIFIC PROBLEMS OF AUTOMATIC TEXT PROCESSING (Chastnie Voprosi Avtomaticheskogo Analiza Tekstov), Minsk, 1972, pp. 6-16, published in Russian.

5. Can we measure Word Meaning? by Hristo Georgiev, co-authors: Prof. Dr. R G. Piotrowskij, V. Pestunova, V. Bogodist, R. Sijri, D. Baitanaeva, K. Bektaev; in: STATISTIKS OF KAZACH TEXTS (Statistika Kazahskogo Teksta), III, Alma Ata, 1973, pp. 696-721, published in Russian .

6. Entropy of the Bulgarian Language, by Hristo Georgiev, in: SLAVIC COLLECTED PAPERS (Slavistichen Sbornik), Sofia University Press, 1973, pp. 223-240, Sofia, published in Bulgarian.

7. Foreign Policy Word Frequency Count, by Hristo Georgiev, in: BULGARIAN LANGUAGE (Bulgarski Ezik), XXIV, book 3, 1974, pp. 245-252, Sofia, published in Bulgarian.

8. **Foreign Policy Word Frequency Count**, by Hristo Georgiev, in: STATISTICS OF SPEECH and AUTOMATIC ANALYSIS OF TEXTS (Statistika Rechi i Avtomaticheskij Analiz Teksta), Nauka publ., 1974, pp. 330-334, St. Petersburg, published in Russian.

9. **Meaning Information and its Measures**, by Hristo Georgiev, co-authors: Prof. Dr. R.G. Piotrowskij, in: REVUE ROMAINE de LINGUISTIQUE, 1, XIX, No2, 1974, pp. 123-132, Bucharest, published in English.

10. **La Traduction Automatique en U.S.S.R.**, by Hristo Georgiev, co-authors: Prof. Dr. R.G. Piotrowskij, in: REVUE ROMAINE de LINGUISTIQUE, 1, XIX, No2, 1974, pp. 73-79, Bucharest, published in French. The article outlines the progress made in Machine Translation, in Russia, up to this date.

11. **Is a Message Meaningful?**, by Hristo Georgiev, in: REVUE ROMAINE de LINGUISTIQUE, 1, XIX, No2, 1974, pp. 547-550, Bucharest, published in English.

12. **Une Nouvelle Method d'Evalution de l'Information**, Semasiologique, by Hristo Georgiev, co-authors: Prof. Dr. R.G. Piotrowskij, V. Pestunova, Bogodist, R. Sijri; in: LINGUISTIKA, V, Tartu, Estonia, published in French.

13. **How can we measure Meaning Information?**, by Hristo Georgiev, co-authors: : Prof. Dr. R.G. Piotrowskij, V. Pestunova, Bogodist, R. Sijri; published in: SCIENTIFIC ISSUES OF HIGHER EDUCATION (Nauchnie Voprosi Vishei Shkoli), Philological Sciences, 1975, No4, pp. 91-101, published in Russian.
https://perviydoc.ru/

14. **New Informational Language „Politics"**, by Hristo Georgiev, published in: 1-st NATIONAL CONFERENCE ON USING MATHEMATICAL METHODS and COMPUTERS IN LINGUISTICS, summary of a report, 1975, p.7, Varna, Bulgaria, published in Russian.
The report outlines the semantic description method used later in the software programs developed by the author and published later in his book Dictionary of Word Meanings.

15. **Automatic Analysis of Bulgarian Scientific Texts**, by Hristo Georgiev, published in: 1-st NATIONAL CONFERENCE ON USING MATHEMATICAL METHODS and COMPUTERS IN LINGUISTICS, summary of a report, 1975, p. 59, Varna, Bulgaria, published in English.

16. **Automatic Recognition of Word Meaning**, by Hristo Georgiev, INTERNATIONAL CONFERENCE ON BASIC ISSUES IN BIONIKS, BIONIKA, summery of a report, 1975, pp. 133-134, Varna, Bulgaria, published in Russian.

17. **Semantische Information und Arten Ihrer Messung**, by Ch. Georgiev, co-authors: Prof. Dr. R.G. Piotrowskij, V. Bogodist, V. Pestunova, S. Raitar, published in: ZEITSCHRIFT FÜR PHONETIK, SPRACHWISSENSCHAFT und KOMMUNIKATIONSFORSCHUNG, B. 28, Heft 2, pp. 221-235, 1975, Berlin, published in German. :
https://www.degruyter.com/document/doi/10.1524/stuf.1975.28.16.221/pdf

18. **Review** of: Dr. R.G. Piotrowskij's book, **Text, Machine, Chelovek** (Text, Machine, Man), 327 pages, by Hristo Georgiev, published in Russian by Nauka publ, St. Petersburg, 1975, the review is published in: REVUE ROMAINE de LINGUISTIQUE, XXI, No 4, Bucharest, published in English.

`19.` A New Method of Measuring Meaning, by Hristo Georgiev, co-author: Prof. Dr. R.G. Piotrowskij, published in: LANGUAGE AND SPEECH, vol. 19, part 1, 1976, pp. 41-45, London, in English.

`20.` Automatic Recognition of Verbal and Nominal Word Groups in Bulgarian Texts, by Hristo Georgiev, in: t.a. Informations, REVUE INTERNATIONAL DU TRAITMENT AUTOMATIQUE DU LANGAGE, Dix-septieme anee, No 2, 1976, pp. 17-24, Grenouble, France, in English.
The article outlines the Natural Language Parsing method used later in the software programs developed by the author and published later in his book English Algorithmic Grammar.

`21.` Brief Lexico-Semantical Description of the Subject Field „Oil and Gas", by Hristo Georgiev, in: t.a. Informations, REVUE INTERNATIONAL DU TRAITMENT AUTOMATIQUE DU LANGAGE, Vingtieme anee, No 1, 1979, pp. 47-59, Grenoble, France, in English.
The article outlines the semantic description method used later in the software programs developed by the author and published later in his book Dictionary of Word Meanings.

`22.` Words Denoting Psychic Activity in Balkan Languages, by Hristo Georgiev, co-author: D. Raynova, in: LINGUISTIQUE BALKANIQUE, XXXII, 3-4, pp. 203-221, 1989, Sofia University Press, Sofia, in English.

`23.` A Model of the Lexico-Semantical System „Time" in English and in the Bulgarian Languages, by Hristo Georgiev, co-author: D. Raynova, in: METHODOLOGY, MODELLING, COMPUTERS (Metodologia, Modelirane, Computri), 3-d National Theoretical Conference, Collected Papers, t. IV, Veliko Turnovo, Bulgaria, 1989, in English.

III. Patents.

1. U.S.8560305 B1, Patent, published on 15.10.2013, LOGICAL INFERENCE: LOGIFOLG, A Computer System for Automated Reasoning to find implicit information in Natural Language Sentences. A software prototype, version 1, was developed upon the patent and released for public download on the same day when the patent application was filed, with the inscription "patent pending". Online download link of the published patent:

http://www.google.com.ar/patents/US8560305

2. US 20140025366 A1, Patent Application, 23 Jan. 2014, TEXT-TO-SPEECH, Single language and bilingual Machine Translation. A software prototype, version 1, was developed upon the patent application and released for public download on the same day when the patent application was filed, with the inscription "patent pending". Online download link of the published patent application: http://www.google.com/patents/US20140025366

3. US20130035928A1, Patent Application, Feb. 7, 2013, TxtVideolizer (applied as TxtVsiolizer, published as "TXTANALIZER"): Text-to video Machine Translation. TxtVideolizer understands the meaning of the sentence and translates it into motion pictures, into separate scenes, portraying, visually, what was meant by the sentence or the text. Published patent application: US20130035928A1, Feb. 7, 2013. A software prototype, version 1, was developed upon the patent application and released for public download on the same day when the patent application was filed,

with the inscription "patent pending". Online download link of the published patent application:
http://www.google.com/patents/US20130035928

4. A Computer System for Automated Reasoning to find new information in Natural Language Sentences, Patent Application No 147008334, filed on 11-th of May 2015. Publication No 20160335251, November 17, 2016. Online download link:
https://patents.google.com/patent/US20160335251A1