Curriculum Vitae

Personal Information

- Full name: Gabriel Emerson Iturra Bocaz

- Nationality: Chile

- E-mail: gabriel.e.iturrabocaz at uis.no / g.iturra.bocaz at gmail.com

- Public Profiles: personal website, Google Scholar, UiS, LinkedIn, GitHub, ResearchGate, Semantic Scholar, Orcid, IMFD, Twitter.

- Areas of Interest: Information Retrieval, Large Language Models, Natural Language Processing, Reinforcement Learning, Machine Learning, Artificial Intelligence

Education

- PhD. Computer Science, University of Stavanger (Ongoing).

- MSc. Computer Science, University of Chile (2023).

- Computer Science Engineer, University of Chile (2021).

- BSc. Computer Science, University of Chile (2020)

- BSc. in Industrial Engineering, University of Chile (2019).

Experience

- November 2024 - present: Research Fellow, Information Access and Artificial Intelligence research group, University of Stavanger.

- June 2024 - September 2024: GenAI Developer at GlobalConexus.

- March 2024 - July 2024: Part-time Professor at Department of Computer Science, University of Chile.

- February 2024 - May 2024: Machine Learning Engineer at Replai SpA.

- August 2023 - December 2023: Part-time Professor at Master of Data Science, University of Chile.

- Jul 2021 - Jun 2023: Research Assistant, FONDECYT 11200290, Chile. Project: Tracking Social Public Opinion: A Stream-Mining Based Approach.

- Jul 2021 - Jun 2023: Researcher Intern, Millennium Institute for Foundational Research on Data, Chile.

- Jul 2021 - Jun 2023: Researcher Intern, National Center for Artificial Intelligence, Chile.

- March 2018 - September 2020: Director of I. T., Beauchef Networking.

- March 2020 - July 2020: Web Developer, UGU S. A.

- January 2019 - March 2019: Web Developer, Memory and Neuropsychiatry Clinic, Faculty of Medicine, University of Chile.

- January 2018 - February 2018: Intership, Wizz, Mobile Developer.

- December 2016 - January 2017: Intership, Web Intelligence Centre, Software Developer.

Teaching

- [CC5205] (Lecturer) Data Mining (fall 2024), Department of Computer Science, University of Chile.

- [MDS7202] (Lecturer) Data Science Laboratory (spring 2023), Postgraduate School, University of Chile.

- [CC66E] (Lecturer) [Data Mining] (fall 2024), Continual Education Program, Department of Computer Science, University of Chile.

- [CC66S] (TA) Machine Learning (Spring 2023), Continual Education Program, Department of Computer Science, University of Chile.

- [CC66Q] (TA) Natural Language Processing (spring 2023, fall 2024), Continual Education Program, Department of Computer Science, University of Chile.

- [DEDCCPYAC02] (TA) Data Management and Data Mining in Python (spring 2023), Continual Education Program, Department of Computer Science, University of Chile.

- [CC5402] (TA) Software Project (spring 2023), Department of Computer Science, University of Chile.

- [CC6105] (TA) Statistical Thinking (spring 2022), Department of Computer Science, University of Chile.

- [CC6204] (TA) Deep Learning (spring 2022), Department of Computer Science, University of Chile.

- [CC5205] (TA) Data Mining (fall 2022, fall 2023), Department of Computer Science, University of Chile.

- [CC6205] (TA) Natural Language Processing (fall 2022, fall 2023), Department of Computer Science, University of Chile.

- [CC7910] (TA) Research in Computer Science (Methods, Techniques, Perspectives) (spring 2021, fall 2022, spring 2022, fall 2023, spring 2023, fall 2024, spring 2024, fall 2025), Department of Computer Science, University of Chile

- [IN6534] (TA) Introduction to Deep Learning (spring 2021), Department of Industrial Engineering, University of Chile.

- [CC4102] (TA) Algorithm Design and Analysis (spring 2020, fall 2022, spring 2022, fall 2023), Department of Computer Science, University of Chile.

- [CC4101] (TA) Programming Languages (spring 2020), Department of Computer Science, University of Chile.

- [CC5401] (TA) Software Engineering II (fall 2020), Department of Computer Science, University of Chile.

- [CC3201] (TA) Databases (fall 2019, spring 2019), Department of Computer Science, University of Chile.

- [IQ5412] (TA) Process Modeling and Simulation (spring 2018), Department of Chemical Engineering and Biotechnology, University of Chile.

- [CC5002] (TA) Web Application Development (spring 2017, fall 2018, spring 2018, fall 2019, spring 2019, fall 2020,spring 2020, fall 2021, spring 2021), Department of Computer Science, University of Chile.

- [MA2601] (TA) Ordinary differential equations (fall 2016), Department of Mathematical Engineering, University of Chile.

Service

- Program committee reviewer at 14th Workshop on Computational Approaches to Subjectivity, Sentiment & Social Media Analysis.

- Journal Referee at Nature's Scientific Reports (Certificate).

Short Courses

- LSSDS, La Serena School Data Science, 2-13 August, 2021, La Serena (Certificate of Attendance).

- NORA Summer Research School, Generative AI for Synthetic Data: Applications in Machine Learning (5 ECTS), 10-14 June, 2025, Østfold University, Campus Fredrikstad, Norway.

Publications

1. W. Łajewska, I. Kostric, **G. Iturra-Bocaz**, M. Arustashvili and K. Balog UiS-IAI@LiveRAG: Retrieval-Augmented Information Nugget-Based Generation of Responses (soon).

2. **G. Iturra-Bocaz**, D. Vo and P. Galuščáková [Impact of Shallow vs. Deep Relevance Judgments on BERT-based

Reranking Models](https://dl.acm.org/doi/10.1145/3731120.3744602). Proceedings of the 2025 International ACM SIGIR Conference on Innovative Concepts and Theories in Information Retrieval (ICTIR), Padua, Italy. Association for Computing Machinery. DOI:10.1145/3731120.3744602 (soon).

2. **G. Iturra-Bocaz** and F. Bravo-Marquez RiverText: A Python Library for Training and Evaluating Incremental Word Embeddings from Text Data Stream. In Proceedings of the 46th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2023), Taipei, Taiwan. Association for Computing Machinery. Pages 3027–3036. DOI:10.1145/3539618.3591908 (pdf)(poster).

3. F. Vera, V. D. Cortés, **G. Iturra**, J. D. Velásquez, P. Maldonado and A. Couve, Akori: A Tool Based in Eye-Tracking Techniques for Analyzing Web User Behaviour on a Web Site 2017 IEEE International Conference on Data Mining Workshops (ICDMW), 2017, pp. 635-640, doi: 10.1109/ICDMW.2017.90 (pdf).

Supervision

- [2025 - Ongoing] Dominykas Petniunas, co-supervised with Petra Galuscakova, Master in Computer Science, University of Stavanger.

Thesis

1. Master's Thesis (first five pages in Spanish): RiverText A framework for training and evaluating Incremental Word Embeddings from Text Data Streams (pdf).

Projects

1. Relevance Jugdements: Official repostory from the paper Impact of Shallow vs. Deep Relevance Judgments on BERT-based Reranking Models (as main developer).

2. RiverText: A Python Library for Training and Evaluating Incremental Word Embeddings from Text Data Streams (as main developer).

3. MDS7202 Official repository from the Data Science Laboratory course at the Data Science Master Program at the University of Chile (as lecturer).

4. CC66Q Official repository for the Natural Language Processing module in the Artificial Intelligence Diploma Program at the University of Chile (as Teaching Assistant).

5. CC5205 Official repository from the Data Mining course at the Department of Computer Science at the University of Chile (as lecturer).

Awards

- [2024 - 2027] University of Stavanger Doctoral Scholarship.

- [2023] SIGIR Student Travel Grant to attend the 2023 SIGIR International Conference on Information Retrieval in Taipei, Taiwan.

- [2016] Outstading Student in 2016.

Talks and Workshops

- [January 2024] Workshop on Disinformation in Social Media: How to Protect Yourself from Deception for Seniors, Requinoa and Olivar, Chile (slides in Spanish).

- [September 2023] Poster presentation RiverText: A Framework for Training and Evaluating Incremental Word Embeddings from Text Data Streams, The first Postgraduate Symposium at the Faculty of Math and Physics Sciences from the University of Chile, Santiago, Chile (Certificate of Attendance).

- [July 2023] Paper Presentation entitled: RiverText: A Python Library for Training and Evaluating Incremental Word Embeddings from Text Data Streams, The 46th International ACM SIGIR Conference on Research and Development in Information Retrieval, Taipei, Taiwan (Certificate of Attendance).

- [July 2023] Workshop: Web Scrapping, The Summer Institutes in Computational Social Science, Santiago, Chile.

- [July 2023] Workshop: Text Analysis II, The Summer Institutes in Computational Social Science, Santiago, Chile.

- [April 2023] Department of Computer Science, Universidad de Chile. Thesis Talk, entitled RiverText: A Framework for Training and Evaluating Incremental Word Embeddings from Text Data Streams (slides)(video in Spanish).

Media Outreach

- Revista Bits N° 25: Inteligencia Artificial Generativa, Estudiantes, página 63 (in Spanish).

- Desinformación en redes sociales: cómo protegerte de los engaños para Adultos Mayores en Olivar (in Spanish) (pdf).

Technical Skills

- Programming Languages: Python, Java, C/C++, R, Rust, PHP, and JavaScript.

- Especial Frameworks: PyTorch, TensorFlow, Streamlit, LangChain, FastAPI, Django, Springs Boots, React and React Native

- Databases: PostgreSQL, MySQL and MongoDB.

Languages

- Spanish: Native.

- English: Fluent (C1), Academic IETLS 7.0/9.0.

- Norwegian: Basic proficiency (A1/A2, currently improving).

References

- Petra Galuscakova

  - Associate Professor at University of Stavanger.

  - Contact: petra.galuscakova at uis.no

- Felipe Bravo-Marquez:

  - Associate Professor at University of Chile.

  - Contact: fbravo at dcc.uchile.cl

- Claudio Gutierrez:

  - Full Professor at University of Chile.

  - Contact: cgutierr at dcc.uchile.cl

Gabriel Iturra-Bocaz

Stavanger, Norway June 18, 2025