Diego Emilio Bustamante Henríquez

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Education

2024-2022 Pontificia Universidad Católica de Chile

Santiago, Chile Master of Science in Engineering Sciences with specialization in Computer Science

Thesis year. GPA: 4.0/4.0.

2023-2018 Pontificia Universidad Católica de Chile

Santiago, Chile Major in Computer Science

Senior year. GPA: 4.0/4.0. Ranking: 2nd of 343 students.

2022-2018 Pontificia Universidad Católica de Chile

Santiago, Chile Bachelor in Engineering Sciences

Graduated with honours in the first term of 2022. GPA: 4.0/4.0. Graduation ranking: 6th of 499 students.

Academic honours

2023 ANID - National Master Scholarship

 $Santiago,\ Chile \qquad National\ Scholarship\ for\ Master\ students\ awarded\ by\ ANID,\ an\ agency\ of\ the\ Ministry\ of\ Science,\ Technology,\ Knowledge$

and Innovation of Chile. Selected the 23rd of only 250 scholars awarded by ANID nationwide per year.

Publications

M. Arenas, P. Barcelo, D. Bustamente, J. Caraball, and B. Subercaseaux. A symbolic language for interpreting decision trees, 2023. arXiv: 2310.11636 [cs.L0].

J. P. Salazar-Fernandez, J. Munoz-Gama, J. Maldonado-Mahauad, D. Bustamante, and M. Sepúlveda. Backpack process model (BPPM): a process mining approach for curricular analytics. *Applied Sciences*, 11(9):4265, 2021. ISSN: 2076-3417. DOI: 10.3390/app11094265.

J. Munoz-Gama, J. Maldonado-Mahauad, J. P. Salazar-Fernandez, D. Bustamante, and M. Sepúlveda. Backpack process model (BPPM): curricular analytics through process mining. In *LALA2020: III Conferencia Latinoamericana de Analíticas de Aprendizaje*, Cuenca, Ecuador, 2020.

Work experience

National Institute of Informatics - Intern (3 Months)

Tokyo, Japan Researcher at Linked Open Data for Academia (LODAC) laboratory under the supervision of PhD. Hideaki Takeda.

Applied Natural Language Processing techniques to SPARQL query generation for Knowledge Graph Question Answering.

2023 Millennium Institute Foundational Research on Data - Intern (2 Months)

Santiago, Chile Developer at Millennium DB, a Graph Database System. Worked on the SPARQL implementation as a new query language.

2022-2021 Pontificia Universidad Católica de Chile - Advanced teacher assistant (3 Semesters)

Santiago, Chile Gave lectures and graded tests at: Logic for Computer Science; Formal Languages and Automata Theory; and Digital

Computing: Science and Technology of the Digital World.

2022-2018 Lazos S.A. - Independent service provider (Sporadic)

Santiago, Chile Did maintenance activities at the company servers located in Santiago.

Skills

Lanquaqes: Native: spanish. Advanced: english (FCE level B2). Basic: japanese & mapudungún.

Programming Languages: Advanced: Python, C, C++ & R. Basic: JavaScript, Dart, Ruby & PHP.

Computer skills: Advanced: LATEX, GitHub, HTML, SQL, SPARQL, PostgreSQL & Office. Basic: IBM Quantum,

PyTorch, Clingo, Flutter, Rails, MongoDB, koa, WolframAlpha, SEO, Heroku & namecheap.

Extracurricular activities

2021-2018 PUC - CPU

General Coordinator, General Vice Coordinator and Technician

Non-profit social student initiative whose mission is to recondition computers to reduce electronic waste and donate them in places with low digital penetration to combat the Chilean digital divide.