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: 2^{nd} 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

2024-2023 National Institute of Informatics - Intern (3 Months)

Tokyo, Japan Researcher at Hideaki Takeda's Laboratory. 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 MillenniumDB, 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.