# Diego Emilio Bustamante Henríquez

Contact: diegobustama@hotmail.com Website:diegoemilio.com GitHub: DiegoEmilio01 DBLP: 359/3424

#### 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<sup>nd</sup> 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: 6<sup>th</sup> of 499 students.

## Academic honours

2023 ANID - National Master Scholarship

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

and Innovation of Chile. Selected the  $23^{rd}$  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 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 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

Languages: 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.