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Education

† *Indicates expected*

2021 † Ph.D. in Statistics, Pontificia Universidad Católica de Chile, Santiago, Chile.
2012 M.Sc. in Applied Statistics, Universidad de Concepción, Concepción, Chile.
2009 Teaching degree in Math and Computer Sciences, Universidad Católica del Maule, Talca Chile.

Academic Appointments

I-2021 Part-Time Lecturer, Department of Statistics, Pontificia Universidad Católica de Chile.
2018 – 2021 Teaching Assistant, Department of Statistics, Pontificia Universidad Católica de Chile.
II-2016 Lecturer, Faculty of Basic Sciences, Universidad Católica del Maule.
2011 – I-2016 Part-Time Lecturer, Faculty of Basic Sciences, Universidad Católica del Maule.
2012 – 2016 Part-Time Lecturer, Institute of Mathematics and Physics, Universidad de Talca.

Teaching Experience

Pontificia Universidad Católica de Chile

Graduate level

- Exploratory and Computational Methods for Statistics (I-2019, I-2021), Advanced Statistical Methods III (I-2019), Advanced Statistical Methods II (II-2018). (Teaching Assistant) in *Ph.D. degree, Statistics*.

Undergraduate level

- Statistical Software (I-2021), in *Statistics program*.
- Statistics for Chemistry and Pharmacy (I-2021). In *Pharmaceutical Chemistry program*.
- Introduction to Data Management and Exploration (I-2021), (Teaching Assistant) in *Statistics program*.
- Biostatistics (I-2020), Statistical Methods (II-2019). (Teaching Assistant) in *Statistics program*.

Universidad de Talca

- Statistics and probability (I-2012 to II-2016) in *Undergraduate level, Civil Engineering*.
- Statistical Analysis (I-2016) in *Undergraduate level, Psychology*.
- Statistical quality control (II-2015, I-2016) in *Undergraduate level, Industrial Civil Engineering*.
- Statistics I (I-2014), Statistics II (I-2014) in *Undergraduate level, Public Accountant and Auditor*.

Universidad Católica del Maule

Graduate level

- Data processing and random games (I-2014, 2015, 2016), Probability Models (I-2015, 2016) in *M.Sc. degree, Didactic of Mathematics*.
- Biostatistics (II-2015), Advanced Biostatistics (I-2016) in *M.Sc. degree, Nursing*.
- Fundamentals of Statistics (II-2014, 2015) in *M.Sc. degree, Education*.

Undergraduate level

- Didactic of Statistics (II-2016), Statistics I (II-2016) in *Teaching in Math and Computer Sciences program*.
- Biostatistics (II-2011, I-2012) in *Nutritionist program*.
- Linear regression analysis (I-2011), Statistics and experimental designs (II-2011) in *Forest Engineering program*.

Fellowships and Awards

- 2018 CONICYT, Doctorado Nacional, 2018. Chilean Government, Ph.D. Scholarship.
- 2017 Teaching Assistant. Graduate School, Pontificia Universidad Católica de Chile, Ph.D. Scholarship
- 2010 Graduate scholarship. Graduate School, Universidad de Concepción, M.Sc. Scholarship.

Publications

- [1] Alarcón-Bustamante, E., San Martín, E. & González, J. (in press). On the marginal effect under partitioned populations: Definition and Interpretation. In Wiberg, M., Molenaar, M., González, J., Böckenholt, U., and Kim, JS. (Eds.), *Quantitative Psychology: The 85th Annual Meeting of the Psychometric Society, Virtual*. Springer Proceedings in Mathematics & Statistics.
- [2] Alarcón-Bustamante, E., San Martín, E. & González, J. (2020). Predictive validity under partial observability. In Wiberg, M., Molenaar, M., González, J., Böckenholt, U., and Kim, JS. (Eds.), *Quantitative Psychology. IMPS2019*. Springer Proceedings in Mathematics & Statistics, vol 322. Springer, Cham. [DOI 10.1007/978-3-030-43469-4_11](https://doi.org/10.1007/978-3-030-43469-4_11)

- [3] Cornejo, J., Tapia, J., Guerra, F., Yáñez, M., Baettig, R., Guajardo, J., Alarcón, E. & Vidal, G. (2017). Variation in Copper Accumulation at the Tissue Level of Five Hybrid Poplars Subjected to Copper Stress. *Water Air and Soil Pollution*, 228:212. DOI [10.1007/s11270-017-3384-7](https://doi.org/10.1007/s11270-017-3384-7)
- [4] Vásquez, B. & Alarcón, E. (2016) Inclusión en universidades chilenas: del discurso a interacciones prácticas, políticas y culturales. *Pensamiento Educativo. Revista de Investigación Educativa Latinoamericana*, 53(2), 1-19. DOI [10.7764/PEL.53.2.2016.9](https://doi.org/10.7764/PEL.53.2.2016.9)

Selected Presentations

- [1] Alarcón-Bustamante, E. (2021, Feb) *Predictive Validity Under Partial Observability*. Paper selected for presentation at the International Objective Measurement Workshop (IOMW) Conference, Berkeley, CA. <https://www.iomw.org/>.
- [2] *Ignorabilidad o no Ignorabilidad... esa es la cuestión*. 16° aniversario de la carrera de Pedagogía en Matemática y Computación, Universidad Católica del Maule. November, 2020.
- [3] *New Insights on marginal effects*. (Virtual) International Meeting of the Psychometric Society. July, 2020.
- [4] *Partial identification in predictive validity of selection tests*. International Meeting of the Psychometric Society, Santiago, Chile. July, 2019.
- [5] *La inclusión en la universidad chilena, desde el discurso hacia las interacciones*. Cuarto congreso interdisciplinario de investigación en Educación, Santiago, Chile. August, 2017.
- [6] *Datos, azar y probabilidades en el ayer, hoy y siempre*. Primer seminario de Matemática para docentes de establecimientos PACE. Universidad Católica del Maule, Talca, Chile. November, 2016.

Events Organizer

- [Ciclo de Minicursos 2020](#). October 2020 - January 2021.
- Workshop: [1er Workshop \(virtual\) de estadística: Contribuciones de posgrado](#). August, 2020.
- [Conversatorios COVID-19](#). June - August, 2020.
- Symposium: *Advanced topics in admission university tests*, International Meeting of the Psychometric Society, 2019.

Other Relevant Information

- Secretary of the [Chilean Society of Statistics](#) , 2020-2021.
- Researcher, [LIES, Interdisciplinary Laboratory of Social Statistics](#), 2018 to present.
- Content Manager, Chilean Society of Statistics Website and Social Networks.
- Content Manager, Interdisciplinary Laboratory of Social Statistics Website and Social Networks.
- Member of the Volunteer Team, International Meeting of the Psychometric Society, 2019.

Skills

- **Softwares:** R, SQL, Stan, Mplus, SPSS, Minitab, \LaTeX .
- **Languages:** Spanish (native), English (intermediate).