





Eloy Alvarado Narváez

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EMPLOYMENT

2023 –	Academic Instructor, Universidad Técnica Federico Santa María	<i>Santiago, Chile.</i>
2022 – 2022	Lecturer, Universidad Técnica Federico Santa María	<i>Santiago, Chile.</i>
2021 – 2022	External Adviser, Instituto de Fomento Pesquero	<i>Valparaíso, Chile.</i>
2019 – 2022	Lecturer, Universidad de Valparaíso	<i>Valparaíso, Chile.</i>
2017 – 2017	Lecturer, Pontificia Universidad Católica de Valparaíso	<i>Valparaíso, Chile.</i>
2016 – 2017	Statistical Analyst, Equifax Inc.	<i>Santiago, Chile. / Atlanta, US.</i>

EDUCATION

2018 – 2022	Ph.D. in Statistics, Instituto de Estadística, Universidad de Valparaíso	<i>Valparaíso, Chile.</i>
	Advisors: Moreno Bevilacqua and Christian Caamaño	
2013 – 2015	Bachelor in Statistics / Statistician, Pontificia Universidad Católica de Valparaíso	<i>Valparaíso, Chile.</i>
2014	Exchange program in Korea University	<i>Seoul, South Korea</i>

LANGUAGES

Spanish	Native Speaker
English	Full professional proficiency, TOEFL iBT 90 (November, 2015)
French	Beginner A1, Institut Français
Korean	Beginner A2, Korea University

RESEARCH ARTICLES

1. María Elisa Farías, Eloy Alvarado, and Javier Scavia. Is divergence the cause? contagion in times of financial distress. *Applied Economics (Under Review)*, 2024.
2. Eloy Alvarado, Francisco Plaza-Vega, Carlos Montenegro, and Oscar Saavedra. Deep learning-based classification of species in central-southern fisheries in chile. *Latin American Journal of Aquatic Research (Under Review)*, 2024.
3. Moreno Bevilacqua, Eloy Alvarado, and Christian Caamaño-Carrillo. A flexible clayton-like spatial copula with application to bounded support data. *Journal of Multivariate Analysis*, 201:105277, 2024. Copula Modeling from Abe Sklar to the present day.
4. Víctor Beltrán, Marco Flores, Cristina Sanzana, Fernanda Muñoz-Sepúlveda, Eloy Alvarado, Bernardo Venegas, Juan Carlos Molina, Sandra Rueda-Velásquez, and Alfredo von Marttens. Tooth Loss and Caries Experience of Elderly Chileans in the Context of the COVID-19 Pandemic in Five Regions of Chile. *International Journal of Environmental Research and Public Health*, 20(4):3001, January 2023.
5. Víctor Beltrán, Alfredo von Marttens, Pablo Acuña-Mardones, Cristina Sanzana-Luengo, Sandra J Rueda-Velásquez, Eloy Alvarado, Marco Flores, Angeline Cerda, and Bernardo Venegas. Implementation of a teledentistry platform for dental emergencies for the elderly in the context of the covid-19 pandemic in chile. *BioMed Research International*, 2022, 2022.
6. Víctor Beltrán, Pablo Acuña Mardones, Jaime Díaz, Eloy Alvarado, and Alfredo von Marttens. Tego:

A new concept of teledentistry for the elderly through a web platform and mobile app in the context of the covid-19 pandemic. *Journal of Oral Research*, (1):1–8, 2022.

7. Cristina Sanzana-Luengo, Leonardo Díaz, Liliann Abarza, Eloy Alvarado, and Víctor Beltrán. Teledentistry protocol for the elderly in the context of the covid-19 pandemic through a web platform/mobile app: approach from the general dentist. *Journal of Oral Research*, pages 1–8, 2022.
8. M Stehlík, J Kisel'ák, A Dinamarca, E Alvarado, F Plaza, FA Medina, S Stehlíková, J Marek, B Venegas, A Gajdoš, et al. Redacs: Regional emergency-driven adaptive cluster sampling for effective covid-19 management. *Stochastic Analysis and Applications*, pages 1–35, 2022.

WORKING PAPERS

1. *Simulation-based road characterization using LiDAR intensity: a random field approach for mining haul roads*. Joint work with David Godoy and Tomás Chávez.
2. *Ali-Mikhail-Haq spatial copula*. Joint work with Moreno Bevilacqua and Christian Caamaño-Carrillo.
3. *Weibull random fields through Clayton spatial copula: An application to mining haul roads*. Joint work with Christian Caamaño-Carrillo and Luis Riquelme.
4. *A CAPM Approach with Stable Error Distributions: Application to Brazilian Market Dynamics*. Joint work with María Elisa Farías and Kerlyns Martínez.

GRANTS AND PROJECTS

- 2023 – 2024 Modeling and estimating massive point referenced spatial data, MATH-AMSUD AMSUD220041. Research Associate.
- 2018 – 2022 National Doctoral Degree, ANID. No. 2018-21180953
- 2020 – 2020 Semi-presential technological support platform for urgent and priority dental care for the elderly in the context of the COVID-19 pandemic in the Chilean population, ANID, Reference No. COVID0766, Chile. Collaborator

TEACHING

UNIVERSIDAD TÉCNICA FEDERICO SANTA MARÍA

- 2024/01-02 ICN 292: Management Information Systems
- 2024/01 PII 402: Stochastic Processes (Postgraduate)
- 2023/02 PII 402: Stochastic Processes (Postgraduate)
- 2023/01 ICN 292: Management Information Systems
- 2023/01 IND 163C: Business Analytics
- 2022/02 IND 163C: Business Analytics

UNIVERSIDAD ANDRÉS BELLO

- 2024/01 CIND 217: Inteligencia de Negocios
- 2023/02 IICG P01: Inteligencia de Negocios

UNIVERSIDAD DE VALPARAÍSO

- 2022/02 IEST 422: Statistical Quality Control
- 2022/02 LFIS 325: Statistics for Physical Sciences
- 2022/01 IECD 411: Machine Learning
- 2022/01 IEST 414: Time Series
- 2022/01 IECD 415: Multivariate Methods
- 2021/02 IECD 325: Linear Models and Experimental Design
- 2021/02 LFIS 325: Statistics for Physical Sciences

2021/02 IEST 412: Sampling Theory II
 2021/01 IEST 322: Sampling Theory I
 2021/01 IEST 412: Sampling Theory II
 2021/01 IEC 311: Probability and Statistics
 2020/02 IEST 322: Sampling Theory I
 2020/02 LFIS 325: Statistics for Physical Sciences
 2020/01 IEST 412: Sampling Theory II
 2020/01 IEC 311: Probability and Statistics
 2019/02 IEST 322: Sampling Theory I
 2019/02 IEST 213: Statistical Methods

PONTIFICIA UNIVERSIDAD CATÓLICA DE VALPARAÍSO

2017/02 EST 205: Probability and Statistics
 2017/01 EST 205: Probability and Statistics

ADVISING

2024 Nicolás Bravo. Industrial Engineering. Universidad Técnica Federico Santa María. Advisor.
 2023 Ricardo Menares. Statistics and Data Science Engineering. Universidad de Valparaíso. Co-advisor.
 2022 Cristóbal Collao. Statistical Engineering. Universidad de Valparaíso. Co-advisor.

SCIENTIFIC EVENTS

Nov 2024 *“Weibull random fields through Clayton spatial copula An application to mining haul roads”*. III Statistical Engineering Conference. Organizer: Universidad de Santiago de Chile
 Oct 2024 *“Archimedean-like spatial copulas”*. XLVII National Conference on Statistics. Organizer: Chilean Statistical Society
 Oct 2024 *“Análisis de la intención de uso de TIC en Ingeniería Civil Industrial: Integrando UTAUT y Modelos de Ecuaciones Estructurales”*. XXXVI Chilean Congress of Engineering Education. Organizer: Chilean Society of Engineering Education
 Aug 2024 *“Workshop: Investigación Reproducible con R”*. Open Science Webinar USM. Organizer: Universidad Técnica Federico Santa María
 Jul 2024 *“Experiencias en Ciencia Abierta”*. Ciencia Abierta USM. Organizer: Universidad Técnica Federico Santa María
 Jul 2024 *“Archimedean-like spatial copulas and their applications”*. Colloquium on Statistics and Data Science. Organizer: Pontificia Universidad Católica de Chile
 Nov 2023 *“Herramientas y estrategias para una investigación reproducible”*. 3rd Open Science Webinar USM. Organizer: Universidad Técnica Federico Santa María
 Oct 2023 *“Retroalimentación basada en IA para estudiantes de Ingeniería”*. XXXV Chilean Congress of Engineering Education. Organizer: Chilean Society of Engineering Education
 Dec 2022 *“A flexible clayton-like spatial copula with application to bounded support data”*. III Statistics Workshop: Graduate Contributions and Scientific initiation. Organizer: Chilean Statistical Society
 Oct 2015 *“Stochastics differential equations in mathematical finance: The Black-Scholes Model”*. XXI Valparaíso Statistical Week. Pontificia Universidad Católica de Valparaíso

REFERENCES

- Moreno Bevilacqua, Associate Professor at Universidad Adolfo Ibáñez. moreno.bevilacqua@uai.cl
- Christian Caamaño, Associate professor at Universidad del Bío-Bío. chcaaman@ubiobio.cl

- Carlos Montenegro, Head of Fisheries Research at IFOP. carlos.montenegro@ifop.cl