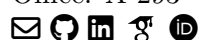


# Eloy Alvarado Narváez

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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 Advisors: Moreno Bevilacqua and Christian Caamaño	<i>Valparaíso, Chile.</i>
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. Tele-dentistry 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 Farias 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*”. Open Science 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 Ibañez. `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`