# Aleksander Dietrichson

#### CHIEF SCIENCE OFFICER

Chi Square Laboratories

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## **Education**

Columbia University New York, NY

PhD in Comparative Education

2001

• Dissertation: Digital Literacy: How to Measure Browsing Behavior.

**Teachers College - Columbia University** 

New York, NY

MA IN APPLIED LINGUISTICS

• Thesis topic: Processing of Alphabetic and Logographic Script in a Cross Cultural Stroop Test. **University of Bergen** 

Norway

1993

BA IN LINGUISTICS, MODERN LANGUAGES AND STATISTICS

• Field of Concentration: Statistics and Quantitative Linguistics.

## Research Appointments \_\_\_\_\_

Keio University Tokyo, Japan

VISITING RESEARCHER 2003-2005

• Developed research-based curriculum for online courses in Academic English.

### **Teachers College - Columbia University**

New York, NY

1999-2000

TECHNOLOGY FELLOW

· Research on LMS and courseware usability.

## **Professional Experience**

Chi Square Laboratories

New York

CHIEF SCIENCE OFFICER 2019 - Present

• In charge of AI research.

• Integration of AI into mobile app.

Universidad de San Martin

Buenos Aires

PROFESSOR 2019 - Present

• Teaching Data Science Al research.

• Research on Artificial Intelligence (LLM and NLP).

X-Ray Research

New York / Buenos Aires /

Montevideo

Monteviaed

Buenos Aires, Argentina

CHIEF DATA SCIENTIST 2018 – 2019

• Consulting on Ethergeist.

Developed synthetic polling algorithms and social network analysis for the Ethergeist's product.

Blackboard Inc. Washington, DC

SENIOR DATA SCIENTIST 2015-2018

• Implemented knowledge transfer related to acquisition of X-Ray Learning Analytics.

• Developed and implemented predictive business intelligence.

- Oversaw scaling of X-Ray Learning Analytics from 3 to 2000+ clients.
- Oversaw implementation of X-Ray algorithms in Blackboard Learn.
- · Developed and implemented retention risk modeling and meta-predictive retention risk modeling.

X-Ray Research

Principal Researcher

2011-2015

• In charge or research and development of learning analytics platform: X-Ray Learning Analytics.

Planned and implemented transition of X-Ray Learning Analytics (acquired by Blackboard).

UVCMS

PRINCIPAL AND OWNER 2003-2011

• Oversaw development of technology and research based products.

- Implemented artificial intelligence in the development of 150+ online courses for McGraw-Hill.
- Designed and implemented Content Authoring Engine (CAE).

**SMC E-Learning** New York, NY CHIEF TECHNICAL OFFICER 2001-2003

• In charge of joint venture with Columbia Digital Knowledge Ventures.

**New York University** New York, NY

ADJUNCT PROFESSOR

• Taught two online and two face-to-face courses in Java and C++.

Columbia University, Language research Lab. New York, NY 1999

RESEARCH ASSISTANT · Wrote white paper on distance learning.

**College of New Rochelle** New York, NY

DIRECTOR FOR COMPUTATIONAL RESOURCES 1999

• Oversaw on-campus computer centers and trained staff.

**College of New Rochelle** New York, NY

1999

New York, NY

ADJUNCT PROFESSOR

• Taught Academic English.

**Teachers College - Columbia University** New York, NY

TEACHING ASSISTANT AND PRODUCER 1998

• Responsible for the design, implementation and technical aspects of two online courses. **Teachers College - Columbia University** 

PROJECT CO-DIRECTOR

• Responsible for data collection and statistical analyses for 'Project Transformations'.

• Served as liason with ORACLE, the project sponsor.

**Centro Cultural Escandinavo** Ouito - Fcuador

COORDINATOR 1994-1996

· Responsible for all the center's activities.

## **Publications**

- 1. Dietrichson, A. (2013). Beyond clickometry: Analytics for constructivist pedagogies. International Journal of E-Learning, 12(4), 333–351.
- 2. Dietrichson, A. (2015). The importance of being ernesto: What quantitative onomastics reveals about multiculturalism in america. Proceedings of the 60th Annual Conference of the International Linguistics Association.
- 3. Dietrichson, A., & Pagnone, P. (2018). Newspaper analysis. Proceedings of LatinR 2018.
- 4. Dietrichson, A. (2017). Where you sit determines where you stand, and how you show it: Social network analysis and quantitative linguistics applied to geo-localized twitter messages. Proceedings of the 61th Annual Conference of the International Linguistics Associ-
- 5. Dietrichson, A., Whitmer, J., & Forteza, D. (2019). Meta-predictive retention risk modeling: Risk model readiness assessment at scale with x-ray learning analytics. Proceedings of the II Conferencia Latinoamericana de Analíticas de Aprendizaje - LALA 2019.
- 6. Dietrichson, A. (2010). Discussion group data patterns: Two approaches to analysis. Proceedings of the 3rd Annual Sloan Consortium Symposium: Emerging Technologies for Online Learning.
- 7. Dietrichson, A. (2004). Multi-modality in on-line communication: Theory and practice. Proceedings of e-Learn 2004 World Conference of e-Learning in Corporate Government, Healthcare and Higher Education.
- 8. Dietrichson, A., Iinuma, M., & Yachi, M. (2004). English academic writing theory and practice of an online tutorial system. Proceedings of the 2004 Conference of the Pacific Association for Computer Assisted Language Learning.
- 9. Dietrichson, A. (2003). Issues in cross cultural interface design in theory and practice. Proceedings of the 2003 Conference of the Asian Association of Computer Assisted Language Learning.
- 10. Dietrichson, A. (2001). Cyber literacy: How to measure browsing behavior. Proceedings of the Fall Symposium of the International Linguistics Association.
- Dietrichson, A. (2001). Cyber metatalk. Proceedings of the 2001 de AREA Conference. 11.
- Dietrichson, A. (1997). Will you stroop for me: Implications of a cross-linguistic stroop test using alphabetic and logographic scripts in 12. combination with arrows. Proceedings of the New York Association for Applied Linguistics Summer Institute.
- 13. Whitmer, J., Dietrichson, A., & O'Haver, B. (2016). Validating automated triggers and notifications @ scale in blackboard learn. Proceedings of the 9th International Conference on Educational Data Mining, EDM 2016, Raleigh, North Carolina, USA, June 29 - July 2, 2016,
- Dietrichson, A. (2017). Going enterprise with x-ray learning analytics. Presentation Made at EARL, San Francisco.

15. Dietrichson, A. (2022). Métodos cuantitativos. bookdown.org. https://bookdown.org/dietrichson/metodos-cuantitativos/

## CRAN contributions \_\_\_\_\_

- 1. Dietrichson, A., & Davit, J. (2019). *ProPublicaR: Access functions for ProPublica's APIs*. https://CRAN.R-project.org/package=ProPublicaR
- 2. Dietrichson, A. (2016). couchDB: Connect to and work with CouchDB databases. https://CRAN.R-project.org/package=couchDB
- 3. Dietrichson, A. (2021). moodleR: Helper functions to work with 'moodle' LMS data. https://CRAN.R-project.org/package=moodleR