



Aarre Laakso

aarre.laakso@gmail.com · +1 (734) 355-1603 · Ann Arbor, USA

EDUCATION

Ph.D. in Cognitive Science and Philosophy with a Concentration in Computer Science

1999

University of California, San Diego

Thesis: "The Significance of Spatial Representation" applied machine learning techniques using a custom neural network simulator written in C++ to study representational similarity in neural systems. Maintained a large database of numeric input and target values and visualized the results using data science techniques. The resulting peer-reviewed paper is a landmark in cognitive neuroscience that is cited to this day.

EXPERIENCE

Independent Evaluation and Impact Units

Evaluator and Developmental Editor, Office of Evaluation and Oversight (OVE)

September 2024 – Present

Inter-American Development Bank (IDB), Washington, DC

- **Writing and Editing:** As an integral part of evaluation teams, co-wrote and developmentally edited nearly 15 corporate, sector/thematic, and country program evaluations to enhance their clarity and analytical rigor, using my own experience and tools such as ChatGPT and Argdown (a computer markup language for argument analysis). **Example:** Wrote substantial portions of the relevance and effectiveness chapters of the forthcoming *Transparency and Integrity* evaluation .
- **Teaching and Learning:** Trained 50 staff members on writing for impact.
- **Knowledge Management and Data Science:** Applied data science techniques to integrate fragmented data and analyze evaluative evidence. **Example:** Consolidated project evaluation data from multiple spreadsheets into a single relational database, enabling comprehensive analysis across different time periods . **Example:** Wrote Python programs to visualize longitudinal comparisons between individual countries and LAC averages on indicators sourced from the World Bank Group data API and tables automatically read from PDF files.
- **Communications:** Refined nearly 15 sets of communication materials and designed three illustrations that translated complex evaluative findings into concise, insightful messages for operations, management, the Board, and external audiences. **Example:** Clarified the logical structure of the Director's talking points for a Board retreat on PBLs . **Example:** Created a figure illustrating the conceptual framework of the climate adaptation evaluation (anticipatory, absorptive, and adaptive interventions) .

Evaluator and Developmental Editor, Independent Evaluation Group (IEG)

February 2020 – Present

World Bank Group, Washington, DC

- **Writing and Editing:** As an integral part of evaluation teams, co-wrote and developmentally edited more than 15 major corporate and thematic evaluations, using my own experience and tools such as MAi (the WBG's in-house AI chatbot) and Argdown to strengthen clarity and analytical coherence. **Example:** Led the co-TTLs of the *Results and Performance 2025* evaluation through a synthesis exercise that resulted in the final organization of the report around trends, challenges, and levers, overcoming hurdles in ensuring coherence across diverse institutional perspectives .

- **Teaching and Learning:** Mentored lead and senior evaluators on evaluative writing and logical argumentation. **Example:** Worked shoulder-to-shoulder with the lead evaluator of the *Results and Performance 2024* and 2025 reports to refine presentations of findings and successive drafts, providing advice on everything from punctuation to synthesizing key messages.
- **Knowledge Management and Data Science:** Using R, Python, Graphviz and other tools, built nearly 50 structured evidence compendia, charts, theory of change diagrams, and other visualizations to help evaluators and readers manage and understand large datasets, qualitative findings, conceptual frameworks, and complex evaluation results. **Example:** Using R, created more than 20 novel charts depicting the evolution of lockdowns over time by country during the COVID-19 pandemic..
- **Communications:** Supported institutional dissemination and knowledge sharing on international development evaluation results by refining more than 20 sets of communication materials (including announcements, briefs, talking points, and other message-driven summaries, blog posts, and presentations) that translated complex evaluative findings into concise, insightful messages for operations, management, the Board, and external audiences. **Example:** Co-wrote talking points and question and answer documents in preparation for a meeting with the World Bank Group Board’s Committee on Development Effectiveness (CODE) regarding the *Private Sector Window* evaluation .

Writer and Developmental Editor, Impact Department

October 2024 – April 2025

European Bank for Reconstruction and Development (EBRD), London, UK

- **Writing and Editing:** Working as an integral part of the impact unit, co-authored and developmentally edited a corporate impact report, ensuring analytical coherence, narrative flow, consistency across thematic sections, quality, and reach. **Example:** I was the primary author of the introduction, the conclusions, and the annex on the EBRD’s impact management system .
- **Teaching and Learning:** Mentored thematic and impact teams in persuasive analytic writing. **Example:** Worked closely in virtual “shoulder to shoulder” writing meetings with the authors of the human capital thematic chapter to refine key messages and strengthen alignment with EBRD’s strategic impact narrative.
- **Knowledge Management and Data Science:** Supported knowledge communication and dissemination by improving clarity and visual presentation of evaluative findings for institutional and external audiences. **Example:** Advised graphic designer and impact team on revisions to the theory of change diagram.
- **Communications:** Liaised with the EBRD corporate communications team to ensure the report met corporate standards and was pitched appropriately for the expected audience. **Example:** Used Microsoft Copilot to assist with dramatically shortening contributions.

World Bank Group (WBG)

Writer and Structural Editor, Latin America and the Caribbean Regional Units

April 2004 – June 2022

World Bank Group, Washington, DC

- **Writing and Editing:** Strengthened the clarity and consistency of WBG analytical knowledge products by co-writing, editing, and restructuring more than 50 sector and public policy reports on competitiveness, innovation, trade, and private-sector development in Latin America and the Caribbean, ensuring they had message-driven narratives accessible to both technical and policy audiences. **Example:** I was part of the core team that wrote a report on *Digital Entrepreneurship and Innovation in Central America* .
- **Teaching and Learning:** Mentored senior and lead private sector specialists on analytical writing by working side-by-side with them to refine documents and coaching them on writing and editing.
- **Knowledge Management and Data Science:** Used data science and knowledge management skills to translate complex economic analyses into accessible, compelling visualizations. **Example:** For a donor report, used R to create charts comparing time and cost to trade in Central American and OECD countries .

- **Communications:** Wrote and refined communication materials such as briefs, blog posts, web pages, award nominations, videos, and presentations that informed the public, other development institutions, senior government officials, and WBG senior management about the results of operations. **Example:** Wrote a series of one-page results stories and accompanying animated Power Point presentations that illustrated factors behind the successes and failures of operations .

Writer and Structural Editor, Other Regional Units

May 2005 – Present

World Bank Group, Washington, DC

- **Writing and Editing:** Strengthened the clarity and consistency of analytical outputs on private sector issues in Europe and Central Asia, South Asia, and East Asia and the Pacific by co-writing, editing, and restructuring more than more than 50 sector and public policy reports. **Example:** Contributed to every aspect of the *Croatia Science Technology and Innovation Public Expenditure Review* .
- **Knowledge Management and Data Science:** Used data science and knowledge management skills to translate complex economic analyses into visualizations that informed senior management and donors. **Example:** Using Python, created a novel “stellar chart” visualization allowing readers to see at a glance the values of 30 investment climate indicators across seven provinces and municipalities in Nepal .
- **Communications:** Wrote and refined communication materials such as briefs, blog posts, web pages, and award nominations that informed the public, other development institutions, senior government officials, and WBG senior management about the results of operations. **Example:** Wrote a short plain-language brief on saving money, reducing poverty, and diversifying agriculture in Kiribati by phasing out a subsidy on coconut byproducts. The brief summarized three lengthy technical reports and contributed to momentum for government reforms that are now underway .

Research and Teaching

Postdoctoral Research Associate

August 2003 – June 2008

Indiana University, Bloomington, Bloomington, IN

- **Writing and Editing:** Published seven peer-reviewed papers based on my own research on language acquisition and cognitive development in children under six.
- **Knowledge Management and Data Science:** Designed and developed a natural language processing framework in Python to analyze a database of 3.5 million+ words uttered between young children and their caretakers, using R to visualize and analyze the results.
- **Teaching and Learning:** Used teaching, project management, and leadership skills to mentor and supervise undergraduate students in research, writing, and child development.
- **Communications:** Designed and managed a communications campaign to encourage parents to bring their young children to the laboratory to participate in psychology experiments.

Lecturer and Faculty

September 1991 – December 2024

University of California, University of Michigan, Indiana University, Washtenaw Community College

- **Teaching and Learning:** Designed and taught university courses in writing, logic, research methods, statistical analysis, and cognitive and developmental psychology that emphasized research design, analytical reasoning, evidence synthesis, and clarity in scientific writing. **Example:** My class on experimental psychology covered experimental and quasi-experimental research methods, statistical analysis including multiple regression, and writing research papers .

Technology

Managing Architect, Technology Services Division
Silicon Space, Inc., San Diego, CA

June 1997 – June 2003

- **Knowledge Management and Data Science:** Used expertise in object-oriented design techniques and technical fluency in relational database design and other software engineering best practices as well as project management and leadership skills to lead a team of 35+ software engineers designing and deploying secure, database-driven intranet/extranet knowledge management systems for Fortune 500 clients, leveraging systems integration to strengthen organizational information flow. **Example:** Using Java and other technologies, took primary responsibility for all technical aspects of a bespoke intranet system for Hewlett-Packard engineers to manage a manufacturing line for prototype inkjet printers, helping to keep the line “in control” and document the parameters necessary to move to full production .
- **Writing and Editing:** Set standards for, researched, wrote, and reviewed technical documentation, business needs analyses, and software requirements documents, and developed style guidelines, illustrations, and user guidance that translated complex software system systems interfaces into clear, actionable materials for non-technical audiences. **Example:** Documented business needs, software requirements, and system architecture for a client developing an internet-enabled point-of-sale system to be sold through a variety of channels including big box office supply stores .
- **Communications:** Wrote and reviewed press releases and marketing materials explaining complex intranet/extranet systems in terms the press and potential clients could easily grasp. **Example:** Helped produce a set of glossy brochures explaining the work that Silicon Space had done for a variety of clients .
- **Teaching and Learning:** Created and managed the Silicon Space Technology Services Mentoring Program, a system under which more senior software engineers mentored less senior engineers. **Example:** As the most senior software architect in the company, I mentored technical leads (senior software engineers) in software engineering best practices, provided guidance on technical challenges and career development, and facilitated knowledge sharing and collaboration among team members .

LANGUAGES

English (native proficiency), Spanish (limited working proficiency)

AWARDS & HONORS

Ruth L. Kirschstein National Research Service Award (NRSA) Fellowship (2005-2007), United States National Institutes of Health

Dissertation Fellowship (1994-1996), University of California San Diego

Phi Beta Kappa (1991), University of North Carolina Chapel Hill

Morehead Fellowship (1991), University of North Carolina Chapel Hill

Robert J. House Award for Creative Writing (1991), University of North Carolina Chapel Hill

ANNEX A. SELECTED TEACHING EXPERIENCE

- Cognitive Psychology
- Experimental Psychology
- Humanities Writing Program
- Independent Research & Readings
- Individual Research
- Inductive Logic
- Intro. to Epistemology
- Intro. to Psychology as a Natural Science
- Intro. to Psychology as a Social Science
- Philosophy of Psychology
- Predicate Logic
- Propositional Logic
- Writing Competency Program

ANNEX B. SELECTED PUBLICATIONS

- Laakso, Aarre and Rubalcaba, Luis. 2023. "Service ontology." In *Elgar Encyclopedia of Services*, edited by Gallouj, Faiz et al., 19-21. Edward Elgar, Cheltenham, UK. <https://doi.org/10.4337/9781802202595.Service.Ontology>
- Rubalcaba, Luis, Rubalcaba, Leticia, and Laakso, Aarre. 2023. "Big data, services and policy making." In *Elgar Encyclopedia of Services*, edited by Gallouj, Faiz et al., 619-20. Edward Elgar, Cheltenham, UK. <https://doi.org/10.4337/9781802202595.Big.Data.Services>
- Laakso, Aarre. 2011. "Embodiment and development in cognitive science." *Cognition, Brain, Behavior* 15 (4) : 409-25.
- Laakso, Aarre and Calvo, Paco. 2011. "How many mechanisms are needed to analyze speech? A connectionist simulation of structural rule learning in artificial language acquisition." *Cognitive Science* 35 (7) : 1243-1281. <https://doi.org/10.1111/j.1551-6709.2011.01191.x>
- Maouene, Josita, Laakso, Aarre, and Smith, Linda B.. 2011. "Object associations of early-learned light and heavy English verbs." *First Language* 31 (1) : 109-132. <https://doi.org/10.1177/0142723710380528>
- Maouene, Josita, Sethuraman, Nitya, Laakso, Aarre, and Maouene, Mounir. 2011. "The body region correlates of concrete and abstract verbs in early child language." *Cognition, Brain, Behavior* 15 (4) : 449-484.
- Sethuraman, Nitya, Laakso, Aarre, and Smith, Linda B.. 2011. "Verbs and syntactic frames in children's elicited actions: A comparison of Tamil- and English-speaking children." *Journal of Psycholinguistic Research* 40 (4) : 241-252. <https://doi.org/10.1007/s10936-011-9166-2>
- Laakso, Aarre. 2009. "Development and learning." In *The Routledge Companion to Philosophy of Psychology*, edited by Symons, John and Calvo, Paco, 430-449. Routledge, New York.
- Calvo Garzón, Paco, Laakso, Aarre, and Gomila, Tony. 2008. "Dynamics and psychology." *New Ideas in Psychology, Special Issue: Dynamics and Psychology* 26 : 143-145. <https://doi.org/10.1016/j.newideapsych.2008.02.001>
- Laakso, Aarre and Smith, Linda B.. 2007. "Pronouns and verbs in adult speech to children: A corpus analysis." *Journal of Child Language* 34 : 725-763. <https://doi.org/10.1017/S0305000907008136>
- Laakso, Aarre and Cottrell, Gary W.. 2006. "Churchland on connectionism." In *Paul Churchland: Contemporary Philosophy in Focus*, edited by Keeley, Brian. Cambridge University Press.
- Laakso, Aarre and Cottrell, Gary W.. 2000. "Content and cluster analysis: Assessing representational similarity in neural systems." *Philosophical Psychology* 13 (1) : 47-76. <https://doi.org/10.1080/09515080050002726>