Carlos Denner dos Santos Júnior *(he/him)*

Associate Professor | AI Governance & Data Science Researcher

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University of Brasília, Brasília, Brazil

Research Interests

| AI governance | MLOps | Data-intensive systems | Open-source ecosystems | Public-sector IT |

| Predictive analytics |

Academic Appointments

2011–PRESENT **Associate Professor** — University of Brasília (UnB), Brasília, Brazil
- Research and teaching in Information Systems at the intersection of management, computer science, and statistics.
- Focus: AI governance, open-source software ecosystems, IT governance, and data-intensive systems.

2024–PRESENT **Visiting Professor** — Université de Sherbrooke, Sherbrooke, Canada
- Collaborative research on data-driven systems and business intelligence.

2024–PRESENT **Data Science Consultant** — Bell Canada, Montreal, Canada
- Business intelligence and advanced analytics for telecommunications sector.

2019–2021 **Postdoctoral Researcher** — Université du Québec à Montréal (UQAM), LATECE Lab, Montreal, Canada
- CAPES-funded research on software ecosystems and collaborative development.

Education

2009 **Ph.D., Management Information Systems** — Southern Illinois University Carbondale, Carbondale, USA
- Dissertation: *Open Source Software Projects' Attractiveness, Activeness, and Efficiency as a Path to Software Quality: An Empirical Evaluation of their Relationships and Causes*.

- CAPES scholarship (2005–2009).

2005 **M.Sc., Business Administration** — Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, Brazil
- Thesis: *Análise da Substituição de um Software Proprietário por um Software Livre sob a Ótica do TCO (Custo Total de Propriedade)*.
- CNPq scholarship (2003–2005).

2019–2020 **Postdoctoral Fellowship** — Université du Québec à Montréal (UQAM), Montreal, Canada
- CAPES-funded research on open-source software ecosystems and collaborative development.

2019 **Postdoctoral Fellowship** — Universidade Federal de Pernambuco (UFPE), Recife, Brazil
- Research on software engineering and empirical studies.

Profile

- AI scientist and data engineer bridging research and delivery; work spans AI governance, MLOps, and data-intensive systems.
- External footprint: LinkedIn and Google Scholar showcase a substantial publications record (update counts when submitting).

Grants & Sponsored Projects

20XX–20XX **[Project or Grant Title]** — [Sponsor/Agency]
- Role: PI/Co-PI; Amount: [$X].
- Highlights: [1–2 lines on outcomes/impact].

Teaching

20XX–20XX **[Graduate Course Title]** — University of Brasília
Brief description .
20XX–20XX **[Undergraduate Course Title]** — University of Brasília
Brief description .

Advising & Mentorship

Name , Ph.D., UnB, [Year] — [Dissertation Title]. (Advisor/Co-advisor)

Name , M.Sc., UnB, [Year] — [Thesis Title].

Service to Institution & Profession

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ommittee/Role , [Unit], [Years].
orial/Reviewing , [Journal/Conference], [Years].

Selected Talks & Outreach

Talk Title , [Venue], [City], [Year]. `https://link`

Industry & Applied Work

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t/Organization — built predictive models and scalable data pipelines; results: [metric].

Open-source, Data & Software

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sitory/Package , [Language/Stack] — [one-line description]. `https://github.com/...`

Publications

Summary: 67 publications (2005–2025) | 610+ citations | H-index: 10 | Open access: 62.7%

Journal Articles

2025. Almeida, P. G. R. d. and C. D. d. Santos. **Artificial intelligence governance: understanding how public organizations implement IT**. *Government Information Quarterly* **42**(1), pp. 102003–102003.

2025. Mahmoudi, E., M. Movahed, A. Majnemer, C. D. d. Santos, G. Backlin, A. Siou, S. Glegg, L. Pritchard, J. McCabe, and K. Shikako-Thomas. **Gamification strategies that promote leisure participation in children and youth with disabilities**. *Disability and Rehabilitation Assistive Technology*, pp. 1–21.

2024. Araújo, L. F. P. d., C. D. d. Santos, I. N. Ferraz, and P. P. d. Paula. **Ensinando estratégia empresarial usando jogos sérios na graduação: estado atual e potencialidades futuras**. *Gestão org* **21**(1).

2024. Mahmoudi, E., P. Y. Yoo, A. Chandra, R. Cardoso, C. D. d. Santos, A. Majnemer, and K. Shikako-Thomas. **Gamification in mobile apps for children with disabilities: scoping review**. *JMIR Serious Games* **12**, e49029–e49029.

2024. Moura, P. J. d., C. D. d. Santos, C. G. P. Bellini, and J. J. L. Dias. **The Over-Concentration of innovation and Firm-Specific knowledge in the artificial intelligence industry**. *Journal of the Knowledge Economy* **15**(4), pp. 20547–20577.

2024. Paula, P. P. d. and C. D. d. Santos. **Vulnerabilidade INICIAL PÓS-INCUBAÇÃO: PREVENDO a SOBREVIVÊNCIA ORGANIZACIONAL COM APRENDIZAGEM DE MÁQUINA**. *Revista Gestão e Desenvolvimento* **21**(1), pp. 28–50.

2024. Silva, D. A. d., C. D. d. Santos, and I. N. Ferraz. **Como promover a colaboração em plataformas de dados abertos?** *Revista de Ciências da Administração* **26**(66), pp. 1–30.

2023. Mahmoudi, E., P. Y. Yoo, A. Chandra, R. Cardoso, C. D. d. Santos, A. Majnemer, and K. Shikako-Thomas. **Gamification in mobile apps for children with disabilities: scoping review (Preprint)**.

2023. Paula, P. P. d., C. D. d. Santos, and F. F. Couto. **Organizational survival of Technology-Based companies after incubation: a qualitative comparative explanation**. *Review of Business Management* **25**(4), pp. 498–515.

2023. Santos, C. D. d. **Review of: "Artificial intelligence and organizational change"**.

2022. Alves, G. d. F. and C. D. d. Santos. **The diffusion of innovations under normative induction in Brazil**. *RAUSP Management Journal* **57**(2), pp. 149–164.

2022. Etkkali, A., P.-N. Placide, and C. D. d. Santos. **Ict governance performance implications in higher education: a systematic review of the literature**, pp. 102–107.

2022. Ferraz, I. N. and C. D. d. Santos. **Transformation OF FREE AND OPEN SOURCE SOFTWARE DEVELOPMENT PROJECTS: GOVERNANCE BETWEEN THE CATHEDRAL AND BAZAAR**. *Revista de Administração de Empresas* **62**(1).

2022. Pinto, L. F. S., C. D. d. Santos, and S. S. Onoyama. **Individual factors that influence effort and contributions on Wikipedia**. *arXiv (Cornell University)*.

2022. Santos, C. D. d. and J. Alves. **Home advantage in the Brazilian elite football: verifying managers' capacity to outperform their disadvantage**. *arXiv (Cornell University)*.

2022. Santos, C. D. d., I. Castro, G. Kuk, S. S. Onoyama, and M. F. Moreira. **Bucking the trend: an agentive perspective of managerial influence on blogs attractiveness**. *arXiv (Cornell University)*.

2022. Santos, C. D. d., M. Moreira, A. Panis, and D. Alves. **Crowdfunding for entrepreneurial education**. *International Journal of Information and Communication Technology Education* **18**(1), pp. 1–13.

2021. Almeida, P. G. R. d., C. D. d. Santos, and J. S. Farias. **Artificial intelligence regulation: a framework for governance**. *Ethics and Information Technology* **23**(3), pp. 505–525.

2021. Ferraz, I. N. and C. D. d. Santos. **Organization of free and open source software projects: in-between the community and traditional governance**. *Brazilian Business Review* **18**(3), pp. 334–352.

2021. Ribeiro, A. C. M. L., G. Demo, and C. D. d. Santos. **Grupo FOCAL: APLICAÇÕES NA PESQUISA NACIONAL EM ADMINISTRAÇÃO**. *Dialnet (Universidad de la Rioja)*.

2021. Santos, C. D. d., M. A. R. Dantas, R. A. d. Carvalho, H. L. C. Júnior, and L. A. Amaral. **Tecnologias e dados abertos para inovação em governo**.

2021. Silva, D. A. d., J. A. D. SILVA, G. d. F. Alves, and C. D. d. Santos. **Gestão de riscos no setor público: revisão bibliométrica e proposta de agenda de pesquisa**. *Revista do Serviço Público* **72**(4), pp. 824–854.

2021. Yoo, P. Y., M. Movahed, I. Rue, C. D. d. Santos, A. Majnemer, and K. Shikako-Thomas. **Changes in use of a leisure activity mobile app for children with disabilities during the COVID-19 pandemic: retrospective study**. *JMIR Pediatrics and Parenting* **5**(1), e32274–e32274.

2020. Esashika, D. and C. D. d. Santos. **The influence of sponsors on organizational structure of free software communities**. *arXiv (Cornell University)*.

2020. Ribeiro, A. C. M. L. and C. D. d. Santos. **Isso não é uma pirâmide: revisando o modelo clássico de dado, informação, conhecimento e sabedoria**. *Ciência da Informação* **49**(2).

2020. Ribeiro, A. C. M. L. and C. D. d. Santos. **This is not a pyramid: revising the data, information, knowledge and wisdom classical model**.

2020. Santos, C. D. d., I. d. Castro, S. S. Onoyama, and M. F. Moreira. **Bucking the trend: an agentive perspective of managerial influence on Blog'S attractiveness**. *Proceedings of the ... Annual Hawaii International Conference on System Sciences/Proceedings of the Annual Hawaii International Conference on System Sciences*.

2019. Kohler, C. R. L., C. D. d. Santos, and M. Bursztyn. **Understanding environmental terrorism in times of climate change: implications for asylum seekers in germany**. *Research in Globalization* **1**, pp. 100006–100006.

2019. Oliveira, L. F. d. and C. D. d. Santos. **Intended AND UNINTENDED CONSEQUENCES OF INNOVATION ADOPTION: OPEN GOVERNMENT DATA ADOPTION BY THE FEDERAL DISTRICT OF BRAZIL**. *REAd Revista Eletrônica de Administração (Porto Alegre)* **25**(1), pp. 1–25.

2019. Panis, A., C. D. d. Santos, and J. B. S. Silva. **Crowdfunding in higher education: a classroom exercise for knowledge application and transfer**. *AIS Electronic Library (AISeL) (Association for Information Systems)*.

2019. Silva, D. A. and C. D. d. Santos. **Open government data: from transparency to social participation**. *AIS Electronic Library (AISeL) (Association for Information Systems)*.

2018. Alves, G. d. F. and C. D. d. Santos. **The day after adoption: managerial innovation abandonment and recycling**. *AIS Electronic Library (AISeL) (Association for Information Systems)*.

2018. Gelenske, T. L., J. S. Farias, and C. D. d. Santos. **The PERCEIVED RISK AND TRUST IN THE BANK'S BRAND ON THE MOBILE BANKING USER VISION**. *Reuna* **23**(2), pp. 1–22.

2018. Oliveira, L. F. d. and C. D. d. Santos. **Public value innovation**, pp. 1–9.

2018. Paula, P. P. d., J. S. Farias, and C. D. d. Santos. **Uma ANÁLISE SOBRE STARTUPS DE BASE TECNOLÓGICA a PARTIR DA LITERATURA DO PERÍODO 2008-2017**. *Anais do ... EGEPE*.

2018. Pinto, L. F. S. and C. D. d. Santos. **Motivations of crowdsourcing contributors**. *Innovation & Management Review* **15**(1), pp. 58–72.

2017. Esashika, D. and C. D. d. Santos. **The influence of sponsors on organizational structure of free software communities**, pp. 265–272.

2017. Oliveira, L. F. d. and C. D. d. Santos. **Inovações no setor público : uma abordagem teórica sobre os impactos de sua adoção**.

2017. Pinto, L. F. S., S. S. O. Mori, and C. D. d. Santos. **Inovação na contramão: uma bibliometria dos artigos relativos aos usuários que inventam**. *Revista de Administração* **15**(3), pp. 74–94.

2017. Santos, C. D. d. **Changes in free and open source software licenses: managerial interventions and variations on project attractiveness**. *Journal of Internet Services and Applications* **8**(1).

2017. Santos, L. C. and C. D. d. Santos. **A study on the impact of non-operational mechanisms on the effectiveness of public information technology governance**. *Revista de Administração* **52**(3), pp. 256–267.

2016. Miranda, J. Q., C. D. d. Santos, and A. T. Dias. **A INFLUÊNCIA DAS VARIÁVEIS AMBIENTAIS e ORGANIZACIONAIS NO DESEMPENHO DE STARTUPS**. *REGEPE Entrepreneurship and Small Business Journal* **5**(1), pp. 28–65.

2016. Oliveira, L. F. d. and C. D. d. Santos. **The two sides of the innovation coin**. *Americas Conference on Information Systems*.

2015. Castro, I. V. and C. D. d. Santos. **"o que gerencio e de quem dependo?": determinantes da ação de blogueiros**. *Revista de Administração Contemporânea* **19**(4), pp. 486–507.

2015. Hastenreiter, D. and C. D. d. Santos. **Impactos da escolha da licença na dinâmica de desenvolvimento de software livre**. *Americas Conference on Information Systems*.

2015. Pinto, L. F. S. and C. D. d. Santos. **Motivações dos contribuidores de crowdsourcing full paper**.

2015. Santos, C. D. d. and L. F. S. Pinto. **Motivações dos contribuidores de crowdsourcing**. *Americas Conference on Information Systems*.

2014. Carletti, L., T. Coughlan, J. Christensen, E. M. Gerber, G. Giannachi, S. Schutt, R. Sinker, and C. D. d. Santos. **Structures for knowledge co-creation between organisations and the public**, pp. 309–312.

2014. Farias, J. S., S. Sanders, C. D. d. Santos, and K. Rozzett. **Aceitação de tecnologia em terminais de autosserviço aeroportuários: explorando os efeitos dos moderadores idade, experiência e gênero**, pp. 66–77.

2014. Heindrickson, G. and C. D. d. Santos. **Information technology governance in public organizations: how perceived effectiveness relates to three classical mechanisms**. *Journal of Information Systems and Technology Management* **11**(2), pp. 297–326.

2014. Santos, C. D. d. **Editorial**. *Revista Eletrônica de Sistemas de Informação* **13**(2).

2013. Castro, I. T. V. M. N. and C. D. d. Santos. **Popularidade em blogs: composição, causas e consequências**. *Revista Brasileira de Administração Científica* **4**(2), pp. 185–198.

2012. Santos, C. D. d., G. Kuk, F. Kon, and J. Pearson. **The attraction of contributors in free and open source software projects**. *The Journal of Strategic Information Systems* **22**(1), pp. 26–45.

2012. Santos, V. A. d., A. Goldman, and C. D. d. Santos. **Uncovering steady advances for an extreme programming course**. *CLEI electronic journal* **15**(1).

2011. Santos, C. D. d., M. B. Cavalca, F. Kon, J. M. Singer, V. Ritter, D. Regina, and T. Tsujimoto. **Intellectual property policy and attractiveness**. *Conference on Computer Supported Cooperative Work*.

2010. Meirelles, P., C. D. d. Santos, J. M. d. Miranda, F. Kon, A. Terceiro, and C. Chávez. **A study of the relationships between source code metrics and attractiveness in free software projects**, pp. 11–20.

2010. Santos, C. D. d. **Atratividade de projetos de software livre: importância teórica e estratégias para administração**. *Sociedad (University of Buenos Aires)*.

2010. Santos, C. D. d., F. Kon, and J. Pearson. **Attractiveness of free and open source software projects**. *AIS Electronic Library (AISeL) (Association for Information Systems)*, p. 105.

2010. Santos, C. D. d. and K. M. Nelson. **Motivation TO CREATE FREE AND OPEN SOURCE PROJECTS AND HOW DECISIONS IMPACT SUCCESS**. *Revista Eletrônica de Sistemas de Informação* **9**(2), pp. 4–4.

2008. Santos, C. D. d. **Understanding partnerships between corporations and the open source community: a research gap**. *IEEE Software* **25**(6), pp. 96–97.

2007. Brookhart, S., C. d. Flora, and C. D. d. Santos. **Bookshelf**. *IEEE Software* **24**(1), pp. 92–94.

2006. Santos, C. D. d. and M. A. Gonçalves. **Análise da substituição de um software proprietário por umSoftware livre sob a ótica do custo total de Propriedade:Estudo de caso do setor de peças automobilísticas**. *DOAJ (DOAJ: Directory of Open Access Journals)*.

2005. Santos, C. D. d. and M. A. Gonçalves. **Análise da substituição de um software proprietário por um software livre sob a ótica do TCO (Custo total de Propriedade):Estudo de caso do setor de peças automobilísticas**. *Americanae (AECID Library)*.

Book Chapters

2024. Ribeiro, A. C. M. L., P. C. Ferreira, and C. D. d. Santos. **Automação e mercado de trabalho: análise da literatura e evidências empíricas**. In: *IPEA eBooks*, pp. 217–253.

2018. Oliveira, L. F. d. and C. D. d. Santos. **Open innovation in the public sector**. In: *Springer proceedings in complexity*, pp. 458–466.

2011. Santos, C. D. d., M. A. Gonçalves, and F. Kon. **Apache sustained competitive advantage in the web server industry**. In: *IGI Global eBooks*, pp. 259–273.

Datasets

2023. Paula, P. P. d., C. D. d. Santos, and F. F. Couto. **Supplementary data - organizational survival of Technology-Based enterprises after incubation: a qualitative comparative explanation**. Harvard Dataverse. Research Dataset.

2022. Castro, I. V. and C. D. d. Santos. **"what do i manage and on whom do i depend": determinants of bloggers' actions**. Research Dataset.

2021. Santos, L. C. and C. D. d. Santos. **A study on the impact of non-operational mechanisms on the effectiveness of public information technology governance**. Research Dataset.

Open Reviews

2023. Santos, C. D. d. **Review of: "Artificial intelligence and organizational change"**.

Technical Skills

- Data/ML: model development, evaluation, MLOps, pipelines.
- Languages/Tools: Python, R, Git.
- Methods: governance analysis, text mining/NLP, survey/field studies.

Languages

Portuguese (native); English (fluent); French (fluent).

Professional Memberships

[Association], [Years]; [SIG/Working Group], [Years].

Awards & Honors

[Award], [Grantor], [Year].