

JUAN MANUEL BARRIOS

CO-FOUNDER & CEO OF IMPRESEE INC.

PERSONAL INFORMATION

FULL NAME Juan Manuel Barrios Núñez
NATIONALITY Chilean
BIRTH YEAR 1979
E-MAIL juan.barrios@impresee.com
PERSONAL HOMEPAGE <https://juan.cl/>

EDUCATION

2013 Ph.D. in Computer Science
 University of Chile, Santiago, Chile.
 Thesis: Content-Based Video Copy Detection.

2006 M.Sc. in Computer Science
 University of Chile, Santiago, Chile.
 Thesis: Catalogación y búsqueda semántica en un sitio web.

2003 Computer Engineer
 University of Chile, Santiago, Chile
 Thesis: Investigación de la plataforma J2EE y su aplicación práctica.

2002 B.Sc. in Engineering with a major in Computer Science.
 University of Chile, Santiago, Chile.

PROFESSIONAL EXPERIENCE

2019—Now Co-Founder & CEO
 Impresee Inc.

2018—Now Adjunct Professor (Part-Time)
 Department of Computer Science, University of Chile
 Santiago, Chile.

2012—2018 Director of Research
 Orand S.A.
 Santiago, Chile.

2005—2007 Java Platform Consultant (Part-Time)
 Universidad Metropolitana de Ciencias de la Educación (UMCE),
 Departamento de Informática.
 Santiago, Chile.

2001—2007 Software Engineer
 Pragma Informática S.A.
 Santiago, Chile.

RESEARCH INTERESTS

Multimedia Information Retrieval, Computer Vision, Machine Learning.

SELECTED PUBLICATIONS

JOURNALS ISI

- [1] Juan Manuel Barrios, Benjamin Bustos, and Tomáš Skopal. Analyzing and Dynamically Indexing the Query Set. *Information Systems*, 45(1):37-47, 2014. ISSN: 0306-4379. Elsevier.
- [2] Juan Manuel Barrios and Benjamin Bustos. Competitive Content-Based Video Copy Detection using Global Descriptors. *Multimedia Tools and Applications*, 62(1):75–110, 2013. ISSN: 1380-7501. Springer.
- [3] Benjamin Bustos, Tobias Schreck, Michael Walter, Juan Manuel Barrios, Matthias Schaefer, and Daniel Keim. Improving 3D Similarity Search by Enhancing and Combining 3D Descriptors. *Multimedia Tools and Applications*, 58(1):81–108, 2012. ISSN: 1380-7501. Springer.

INTERNATIONAL CONFERENCES

- [1] Juan Manuel Barrios and Jose M. Saavedra. Score Propagation based on Similarity Shot Graph for Improving Visual Object Retrieval. In *Speech, Language and Audio in Multimedia Workshop (ACM Multimedia 2015)*. ACM.
- [2] Jose M. Saavedra and Juan Manuel Barrios. Sketch based Image Retrieval using Learned KeyShapes (LKS). In *Proceedings of the British Machine Vision Conference (BMVC 2015)*. BMVA Press.
- [3] Juan Manuel Barrios, Benjamin Bustos, and Tomáš Skopal. Snake Table: A Dynamic Pivot Table for Streams of k-NN Searches. In *Proceedings 5th International Conference on Similarity Search and Applications (SISAP 2012)*, LNCS, pages 25–39. Springer. Selected between the best papers.
- [4] Barbara Poblete, Benjamin Bustos, Marcelo Mendoza, and Juan Manuel Barrios. Visual-Semantic Graphs: Using Queries to Reduce the Semantic Gap in Web Image Retrieval. In *Proceedings 19th ACM International Conference on Information and Knowledge Management (CIKM 2010)*, pages 1553–1556, 2010. ACM.

AWARDS AND HONORS

- | | |
|-----------|---|
| 2018 | Distinguished professor, Department of Computer Science, University of Chile. |
| 2016 | First place eCommerce Startup Competition, eCommerce Day Santiago, Chile. |
| 2015 | Best Demo Award, International Conference on Computer Vision (ICCV). |
| 2011 | Distinguished graduate student, Department of Computer Science, University of Chile. |
| 2003 | Computer Engineering title obtained in 1st position between 514 students. |
| 2003 | B.Sc. obtained in 8th position between 153 students. |
| 1997—2002 | Distinguished student of the Faculty of Physics and Mathematical Sciences, University of Chile (best 6% of all students of the Faculty) for years 1997, 1999, 2000, 2001, and 2002. |

PROJECTS

IMPREESE	Service for searching products in e-commerce stores.
SAFECHECK	Software for automatic processing of bank checks.
METRICKNN	Library for Similarity Search. Released under FreeBSD license. https://juan.cl/metricknn/
P-VCD	Software for Video Copy Detection. Released under GPL license. https://juan.cl/p-vcd/
CATALOGO	Software for cataloging resources on a web site. Released under GPL license. http://sourceforge.net/projects/catalogo/

RESEARCH PROJECTS

2018–2021	CORFO-InnovaChile 18IEAT-93724. Researcher. “Artificial Intelligence and Computer Vision technology to enhance fashion market”.
2015–2017	CORFO-InnovaChile 15ITE2-38948. Researcher. “Searching in Store Catalogs using Computer Vision and Mobile Technology”.
2013–2015	CONICYT PAI-78120426. Main Researcher. “Software development for multimedia event detection”.
2012–2014	CORFO-INNOVA 12IDL2-16293. Researcher. “Handwriting recognition, authenticity verification, and assurance of integrity of scanned documents”.

TEACHING EXPERIENCE

- Professor of “CC6409–Artificial Intelligence Project” at the Department of Computer Science, University of Chile (Spring-2022, Fall-2023).
- Professor of “CC5213–Multimedia Information Retrieval” at the Department of Computer Science, University of Chile (Spring-2017, Fall-2018, Spring-2018, Spring-2019, Fall-2020, Spring-2020, Fall-2021, Spring-2021, Fall-2023).
- Professor of “INF3841–Information Retrieval” at the Master in Artificial Intelligence, Pontifical Catholic University of Chile (Fall-2022).
- Professor of “CC5214–Data Science Project” at the Department of Computer Science, University of Chile (Spring-2019).
- Professor of “CC6204–Deep Learning” at the Department of Computer Science, University of Chile (Fall-2019).
- Professor of “INF384–Multimedia Information Retrieval” at the Department of Informatics, Universidad Técnica Federico Santa María (Spring-2018).
- Professor of “IIC3894–Efficient Image and Video Retrieval” at the Department of Computer Science, Pontifical Catholic University of Chile (Spring-2015, Spring-2016, Fall-2017).
- Professor of “CC5204–Content-Based Image and Video Retrieval” at the Department of Computer Science, University of Chile (Fall-2011, Spring-2011, Fall-2012, Spring-2012, Fall-2013, Spring-2014, Fall-2015, Fall-2016).