Pasuma	
Resume Personal Information	
Name	Antonio González-Torres, Ph.D.
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Nationality TOEIC	Spanish and Costa Rican 930
Google Scholar	https://scholar.google.es/citations?hl=es&user=bBdCmeAAAAAJ
References	
	Dr. Francisco J. García-Peñalvo, Faculty of Sciences, University of Salamanca, Spain, Email: fgarcia@usal.es
	Dr. Roberto Therón-Sánchez, Faculty of Sciences, University of Salamanca, Spain, Email: <a href="mailto:theron@usal.es">theron@usal.es</a>
	Dr. Yuri Engelhardt, University of Twente and University of Amsterdam, Turfdraagsterpad 9 1012 XT Amsterdam, Email: <a href="yuri.engelhardt@gmail.com">yuri.engelhardt@gmail.com</a>
<b>Scientific and Professional</b>	
Associations	
	<ul> <li>IEEE - Institute of Electrical and Electronics Engineers</li> <li>ACM – Association for Computing Machinery</li> </ul>
Research Projects	
January 2018 to December 2020	Design of visual analytics methods in the context of Big Data to support software development and maintenance (AVIB), Costa Rica Institute of Technology, Antonio González Torres (main researcher), \$238.000 granted.
January 2018 to December 2020	Design of visual analytics interaction patterns for collaborative environments with multiple devices, Costa Rica Institute of Technology, Armando Arce (main researcher), \$105.000 granted.
January 2017 to December 2017	A visual analytics framework to support software development and maintenance processes, National Technical University, Costa Rica, Antonio González Torres (main researcher), \$9.000 granted.
September 2010 to August 2013	Diachronic visualization and interactive validation: Intelligent CDH, Ministry of Science and Technology, Spain, Roberto Therón Sánchez (main researcher), €49.00( granted.
Academic Experience	
November 2016 to currently	Assistant Research professor, Costa Rica Institute of Technology (ITCR), Cartago, Costa Rica
July 2014 to currently	Assistant Research professor, ULACIT, San José, Costa Rica
March 2004 to currently (several intermittent appointments)	Adjunct Professor, University of Costa Rica (UCR), Puntarenas and San José, Costa Rica
August 2014 to May, 2015	Cyber Security Analyst – Automation, Equifax Inc., Heredia, Costa Rica
December 2012 to July, 2013	Research Student Intern, Intel Corporation, Heredia, Costa Rica
June 2011 to July, 2012	Infrastructure and network administrator, Grupo Global Exchange, Salamanca, Spain
August 2000 to October, 2005	Associate Professor, Assistant Profesor, ULATINA, San José, Costa Rica
September 2003 to October 2005	Technical Trainer at the Cisco Technical Assistance Center, Sykes Latin America, Heredia, Costa Rica
January 2000 to September 2003	Coordinator of the Computing Section, National Museum of Costa Rica, San José, Costa Rica
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Education	
May 2015	PhD in Computer Sciences – International Ph.D. mention – Summa Cum Laude, University of Salamanca, Spain.
June, 2014	Master in Intelligent Systems, University of Salamanca, Spain.
June 2007	Diploma of Advanced Studies-prosgraduate studies, University of Salamanca, Spain.
November 2000	Master in Information Systems, University of Costa Rica
November 1998	Bachelor in Computing Applied to Business Management, University of Costa Rica
July 1997	Associate degree in Computer Science, University of Costa Rica
Research Stays	
March 22nd to June 22nd, 2010	The Open University, Milton Keynes, United Kingdom.

# **Publications**

#### **Theses**

- [1] González-Torres, A. (2015). Evolutionary Visual Software Analytics (Ph.D. thesis, University of Salamanca, Spain, 2015) (pp. 1-294). Salamanca: University of Salamanca. url: http://hdl.handle.net/10366/128154
- [2] González-Torres, A. (2014). Representación Visual de Sistemas de Software: Evolución y Colaboración (Master`s thesis, University of Salamanca, Spain, 2014) (pp. 1 -66). Salamanca: University of Salamanca.

### Books

[1] González-Torres, A. (2016). Tecnologías de la Información y Gestión de Proyectos (First ed.). San José: Universidad Latinoamericana de Ciencia y Tecnología, Costa Rica. ISBN: 978-9977-37-006-4

# Journals

- [1] González-Torres, A., Garcia-Peñalvo, F. J., Therón Sánchez, R., & Colomo-Palacios R. (2016) Knowledge discovery in software teams by means of evolutionary visual software analytics, Journal of Science of Computer Programming, doi: 10.1016/j.scico.2015.09.005, ISSN: 0167-6423 (Impact Factor: 0.715).
- [2] González-Torres, A., Therón Sánchez, R. & García-Peñalvo, F.J. (2013). How evolutionary visual software analytics supports knowledge discovery, Journal of Information Science and Engineering, Institute of Information Science, Academia Sinica, Taiwan, ISSN: 1016-2364 (Impact Factor: 0.333)
- [3] González-Torres, A., Therón Sánchez, R. & García-Peñalvo, F.J. (2012). Human—computer interaction in evolutionary visual software analytics, Computers in Human Behavior, Elsevier, The Netherlands, doi:10.1016/j.chb.2012.01.013, ISSN: 0747-5632 (Impact Factor: 2.273).
- [4] García Navarro, J.F., Gómez Aguilar, D.A., González-Torres, A., García-Peñalvo, F.J. & Therón Sánchez, R. A (2010). Middleware framework to create data structures for a visual analytics object-oriented approach. International Journal of Knowledge and Learning, Vol. 6, No.2/3 pp. 256 267, ISSN online: 1741-1017 ISSN print: 1741-1009.

# Conferences, symposiums and workshops

- [1] González-Torres, A. (2018). A survey on the tools used in software development and their mapping to the curriculum of computing degrees, 12th International Technology, Education and Development Conference, Valencia, Spain. doi:10.21125/inted.2018.1746 ISSN: 2340-1079, ISBN: 978-84-697-9480 pp. 7420-7429.
- [2] González-Torres, A. (2017). A visual analytics method for assisting scientists and students in the identification of biological species with multiaccess electronic keys. EDULEARN17 Proceedings of the 9th International Conference on Education and New Learning Technologies. doi:10.21125/edulearn.2017.2288, ISBN: 978-84-697-3777-4, ISSN: 2340-1117
- [3] Utsman, R., Padilla Guevara, M., García, M., & González-Torres, A. (2016). Assessment of mobile learning and technology as a complement to the academic teaching by dental faculty at ULACIT. EDULEARN16 Proceedings of the 8th International Conference on Education and New Learning Technologies, 6-10. 10.21125/edulearn.2016.1000, ISBN: 978-84-608-8860-4, ISSN: 2340-1117
- [4] González Torres, A., García-Peñalvo, F.J. & Therón Sánchez, R. (2014). Representación Visual de los Sistemas de Software: Evolución y Colaboración. Avances en Informática y Automática, Octavo Workshop, Spain, ISBN 84-697-1520-8.
- [5] González-Torres Antonio, García-Peñalvo, F.J. & Therón Sánchez, R. A (2013). Framework for the Evolutionary Visual Software Analytics Process. In Information Systems, E-learning, and Knowledge Management Research. Series: Communications in Computer and Information Science. Berlin, Heidelberg: Springer Verlag. VOL. CCIS 278. ISBN 978-3-642-35878-4, pp. 439-447.
- [6] González-Torres, A., Therón Sánchez, R., García-Peñalvo, F.J., Wermelinger M. & Yu Y. (2011). Maleku: an evolutionary visual software analytics tool for providing insights into software evolution. IEEE international conference on software maintenance (ICSM), USA, ISBN: 978-1-4577-0663-9.
- [7] González-Torres, A., Therón Sánchez, R., Telea, A. & García-Peñalvo, F.J. (2009). Combined visualization of structural and metric information for software evolution analysis. In Proc. Intl. Workshop of Principles of Software Evolution (IWPSE). ACM, Amsterdam, The Netherlands, ISBN: 978-1-60558-678-6.
- [8] García Navarro, J.F., Gómez Aguilar, D.A., González-Torres, A., García-Peñalvo, F.J. & Therón Sánchez, R. A (2009). A middleware framework to create and manage data structures for visual analytics. Communications in Computer and Information Science. Springer Verlag, Berlin, Germany. ISBN: 1865-0929

[9] García Navarro, J.F., González-Torres, A., Gómez Aguilar, D.A., Therón Sánchez, R. & García-Peñalvo, F.J. (2009). A visual analytics tool for software project structure and relationships among classes. Lecture Notes in Computer Science (LNCS), Springer Verlag, Germany. 5531, ISBN13: 9783540747994, ISBN10: 3540747990 [10] González-Torres, A., Gómez Aguilar, D.A., Segrera Francia, S., Therón Sánchez, R., Moreno García, M.N. & García-Peñalvo, F.J. (2008). Uncovering the relationships among clases and packages in software evolution. MiWebSe '08: Web Mining and Semantic Web, Spain. ISBN: 978-84-691-5945-3. [11] Therón Sánchez, R., González Torres, A. & García-Peñalvo, F.J. (2008). Supporting the understanding of the evolution of software items. SoftVis '08: Proceedings of the 4th ACM symposium on Software visualization, Ammersee, Germany. ISBN: 978-1-60558-112-5, pp. 189-192. [12] Therón Sánchez, R., González-Torres, A. & García-Peñalvo F.J. (2007). The Use of Information Visualization to Support Software Configuration Management. Lecture Notes in Computer Science (LNCS), Springer Verlag, Germany. 4663, pp. 317-331, ISBN13: 9783540747994 ISBN10: 3540747990. [13] Therón Sánchez, R., González-Torres, A. & García-Peñalvo F.J. (2007). Visualización de la colaboración en la evolución de un ítem de software y la estructura de las baselines. VIII Congreso Internacional de Interacción Persona-Ordenador, Interacción 2007 (AIPO), Il Congreso Español de Informática CEDI'2007, 11-14 septiembre, Zaragoza, Spain. ISBN: 978-84-9732-596-7. **Technical reports** [1] González-Torres, A., Therón Sánchez, R. & García-Peñalvo F.J. (2007). Visualización de la colaboración en la evolución de ítems de software con base en los repositorios de las herramientas SCM. Informe técnico. Departament of Computer Science, University of Salamanca, Spain. Conferences TransferSummit/UK, 2010 (University of Oxford, United Kingdom) Participation as presenter in the 10th International Workshop on Principles of Software Evolution. IWPSE. 2009 (Vriie Universiteit. Amsterdam. Participation in the 9th Internation Symposium on Smart Graphics, SmartGraphics 2009 (University of Salamanca, Salamanca, Spain) Participation as presenter in the 4th ACM Symposium on Software Visualization. SoftVis 2008 (Organized by the University of Bremen in Participation in the 1st Workshop de Minería de web y web semántica, MIWEBSE 2008 (University of Salamanca, Salamanca, Spain) **Continuing Education** Courses Education Introduction to teaching (Costa Rica Instituto of Technology, 2017) Induction Workshop (Costa Rica Instituto of Technology, 2017)

- Communication in the classroom (Costa Rica Instituto of Technology, 2017)
- Information resources (Costa Rica Instituto of Technology, 2017)
- Teaching innovation (Costa Rica Instituto of Technology, 2017)
- University teaching (University of Costa Rica, 2016)
- Teaching students with special needs and disabilities (Costa Rica Instituto of Technology, 2016)

# **Technical courses**

- MEAN stack development (Association of Professionals in Computer Science, Costa Rica, 2015)
- Systems security (IBM train the trainer program for university professors of Costa Rica) – 2012
- Cloud Computing (IBM train the trainer program for university professors of Costa Rica) – 2012
- Information Security (University of Salamanca) 2009.
- Digital Animation: Art and Technology (University of Salamanca) 2007.
- Web Accesibility (University of Salamanca) 2007
- Advances in Internet Security: Fourth National Conference (University of Salamanca) – 2006
- Structured Cabling (Leviton Components) 2002
- Project of Integrated Experiences (National Museum of Costa Rica) 2002
- SQL Server (New Horizons) 2000
- Visual Basic (New Horizons) 2000
- Survey and requirements management- (Infosgroup) 2000
- Analysis, design and database creation using File Maker (National Museum of Costa Rica) 2000

# Courses taught

### Master

- Visual analytics (one time)
- Introduction to Telematics (3 times)
- Local and Metropolitan Networks (3 times)
- Communications Protocols (5 times)
- Interconnection of LAN and WAN Networks (5 times)
- Broadband Networks: Sonet/SDH/ATM (5 times)
- Advanced Design of IP Networks (5 times)
- Telematic Applications (5 times)
- Management of Network Services (5 times)

# **Bachelor Degree**

- Graduation Seminar (9 times)
- Introduction to programming (8 times)
- Data Structures
- Introduction to Computer Science
- Programming I (one time)
- Programming II (C++) (3 times)

	*	Database Administration
	*	Graduation Project
	*	Information Systems
	*	Programming IV (3 times)
	*	Advanced Programming
	*	Computer Networks (5 times)
	*	Introduction to Computer Organization
	*	Project Management
	*	Systems Analysis and Design
Certifications		
Cisco		
	*	CCNA (15 times)
	*	CCNA Security (2 times)
Microsoft		
	*	Exam 70-640: Windows Server 2008 Active Directory, Configuring (2 times)
	*	Exam 70-270: Installing, Configuring, and Administering Microsoft Windows XP Professional
	*	Exam 70-290: Managing and Maintaining a Windows Server 2003 Environment
	*	Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure
	*	Exam 70-291: Implementing, Managing, and Maintaining a Windows Server
Subsidized courses for unemployed people (INEM - Spain)		Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure  Exam 70-350: Implementing Microsoft Internet Security and Acceleration (ISA)
		Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure  Exam 70-350: Implementing Microsoft Internet Security and Acceleration (ISA)
	*	Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure  Exam 70-350: Implementing Microsoft Internet Security and Acceleration (ISA) Server 2004
	*	Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure  Exam 70-350: Implementing Microsoft Internet Security and Acceleration (ISA) Server 2004  Security Network Technician (200 hours)
	* *	Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure  Exam 70-350: Implementing Microsoft Internet Security and Acceleration (ISA) Server 2004  Security Network Technician (200 hours)  Network and Systems Support Technician (200 hours)
unemployed people (INEM - Spain)  Subsidized workers (UE, JCYL -	* *	Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure  Exam 70-350: Implementing Microsoft Internet Security and Acceleration (ISA) Server 2004  Security Network Technician (200 hours)  Network and Systems Support Technician (200 hours)
unemployed people (INEM - Spain)  Subsidized workers (UE, JCYL -	*	Exam 70-291: Implementing, Managing, and Maintaining a Windows Server 2003 Network Infrastructure  Exam 70-350: Implementing Microsoft Internet Security and Acceleration (ISA) Server 2004  Security Network Technician (200 hours)  Network and Systems Support Technician (200 hours)  Computer Applications Programming (400 hours)