

Résumé: Clovis Torres Fernandes

1.1 List of chosen recent Papers

- 1) NORONHA, Robinson Vida; FERNANDES, C. T. **Third-dimensional Representation of Learners' Stereotypes in Exercises treating Ill-Structured Problems**. SBIE'2009 - XIX Brazilian Symposium on Computers in Education, Florianopolis - SC, Brazil, 18-20 nov. 2009. [Accepted]
- 2) SANTANA, E. C., TANAKA, S. H., GUERRA, E. M., SILVEIRA, F. F., FERNANDES, C. T., **Towards a Practical Approach to Testing Pointcut Descriptors With JQuati**. III Latin American Workshop on Aspect-Oriented Software Development, Fortaleza-CE, Brazil, Oct. 04-05, 2009.
- 3) GUERRA, E. M., SOUZA, J. T., FERNANDES, C. T., **A Pattern Language for Metadata-based Frameworks**. 16th Conference on Pattern Languages of Programs, EUA, Chicago, August 28-30, 2009.
- 4) PERILLO, J. R. C., GUERRA, E. M., FERNANDES, C. T., **Daileon: A Tool for Enabling Domain Annotations**. 6th ECOOP'2009 Workshop on Reflection, AOP and Meta-Data for Software Evolution, Genova, Italy, July 06-10, 2009.
- 5) SOUZA, F. M., CUNHA, A. M., FERNANDES, C. T., GUERRA, E. M., **Using GQM for Evaluating Framework Documentation – an Experience Report**. VIII Brazilian Symposium on Software Quality, Ouro Preto - MG, June 01-05, 2009. [in Portuguese]
- 6) OLIVEIRA, José M. P.; JACINTO, Adriana S.; FERNANDES, Clovis T. **Supporting Design Decisions for Modeling Adaptation in Tutoring WEB Systems**. Journal Scientia (Unisinos), v. 22, n. 2, jul/dez, 2009. [Brazilian Journal]
- 7) NORONHA, Robinson Vida; FERNANDES, C. T. **Process of Definition of Learners Stereotypes to Intelligent Tutor System Based on Structural Communication Exercises**. In: CSEDU'2009 - International Conference on Computer Supported Education, Lisbon, Portugal, March 23-26, 2009.
- 8) MATOS, S. N.; FERNANDES, C. T. **Using Responsibilities for Early Identification of Hot Spot Reused in Framework Modeling**. In: STPSA 2008 – 3rd IEEE International Workshop on Security, Trust, and Privacy for Software Applications. In conjunction with the COMPSAC 2008 – 32nd Annual IEEE International Computer Software and Applications Conference, Turku, Finland, July 28 - August 1, 2008. [Proceedings of the IEEE Computer Society Press]
- 9) BRANDÃO, André Luiz; MUSA, Daniela Leal; FERNANDES, Clovis Fernandes. **Methodology for Elaborating Instructional Objectives for Hypermedia Courses**. RENOTE – Journal on New Technologies in Education, v. 6, n. 1, 2008. [ISSN 1679-1916] [in Portuguese – Brazilian Journal]
- 10) GUERRA, E. M., SILVA, O. J., SILVEIRA, F. F., FERNANDES, C. T., **Using Metadata in Aspect-Oriented Frameworks**. 2nd Workshop on Assessment of Contemporary Modularization Techniques (ACoM.08) at OOPSLA 2008 - ACM SIGPLAN International Conference on Object-Oriented Programming, Systems, Languages, and Applications, Nashville, EUA, Oct. 19-23, 2008.
- 11) GUERRA, E. M., SILVA, O. J., SILVEIRA, F. F., FERNANDES, C. T., **Aspect-Oriented Frameworks Based on Metadata**. 2nd Latin American Workshop on Aspect-Oriented Software Development (LA-WASP) co-located with SBES'2008 – Brazilian Symposium on Software Engineering, Campinas-SP, Brazil, Oct. 13-17, 2008.
- 12) GUERRA, E. M., PAVÃO, F., FERNANDES, C. T., **Design Patterns for Metadata-based Frameworks and Components**. SugarLoafPlop'2008 - 7^a Latin America Conference on Pattern Languages for Programming, Fortaleza-CE, Brazil, Aug. 24-27, 2008
- 13) GUERRA, E. M., FERNANDES, C. T., **A Metadata-Based Components Model**. Doctoral Symposium at 22nd European Conference on Object Oriented Programming (ECOOP 08), Pafos, Chipre, July 7-11, 2008.
- 14) VARCHAVSKY, Márcio ; GUERRA, E. M. ; FERNANDES, C. T. **Access Control Solution for Command and Control Systems Integration**. In: The 11th IEEE International Conference on Computational Science and Engineering - Workshops, 2008, São Paulo - SP. Proceedings, 2008. [Proceedings published by IEEE Computer Society Press]
- 15) TEIXEIRA, Jeane S. F. ; SÁ, Eveline J. V. ; FERNANDES, C. T. **A Taxonomy of Educational Games Compatible with the LOM-IEEE Data Model**. Journal Scientia (Unisinos), v. 19, n. 1, jan/jun, 2008. [Brazilian Journal]
- 16) FERNANDES, Clovis Torres; TEIXEIRA, Jeane S. F.; SÁ, Eveline J. V.; OLIVEIRA, José M. P.; MARGHANI, Viviane G. R.; SANTOS Jr., Oiram J. B. **Interpreting Scientific Papers through Critical Thinking and Concept Maps**. In: OKADA, Alexandra (Org.) Cognitive Cartography –

- Knowledge Maps for research, Learning and Teacher Formation. KCM Editora & Gráfica, 1ª Edição – 2008. [ISBN: 9788577690435] [in Portuguese – Brazilian Book Chapter]
- 17) TEIXEIRA, Jeane S. F. ; SÁ, Eveline J. V. ; LOPES, T. M. P. ; COSTA, Inaldo C. ; SILVEIRA, D Ilton M. ; OLIVEIRA, Alessandro R. ; FERNANDES, C. T. ; OLIVEIRA, José M. P. **Towards a Collaborative Educational Game Model.** In: Ned F. Kock. (Org.). e-Collaboration in Modern Organizations: Initiating and Managing Distributed Projects. Hershey PA: IGI Global, 2007. [Book Chapter]
 - 18) LOPES, T. M. P. ; FERNANDES, C. T. **Management and Control of Coding and Testing of Component-based Software.** In: IEEE COMPSAC 2007 - 31st Annual International Computer Software and Applications Conference Doctoral Consortium, 2007. Anais, 2007. v. 1. p. 664-666.
 - 19) NORONHA, Robinson Vida ; ROMISZOWSKI, Alexander ; FERNANDES, C. T. **Use of Structural Communication to Automatically Assign Participants to Discussion Groups in Online Learning.** In: IST-Africa 2007 Conference & Exhibition, Conference Proceedings, Paul Cunningham and Miriam Cunningham (Eds), IIMC International Information Management Corporation, 2007, ISBN: 1-905824-04-1 **[Runner-up Award]**
 - 20) GUERRA, E. M. ; FERNANDES, C. T. **Refactoring Test Code Safely.** In: ICSEA'07- The Second International Conference on Software Engineering Advances, August 25-31, 2007, Isla de Margarita. [Proceedings published by IEEE Computer Society Press]
 - 21) MATOS, Simone Nasser ; FERNANDES, C. T. **Measuring Reuse during the Analysis Phase of Domain Framework Development.** In: ICSEA'07 - The Second International Conference on Software Engineering Advances, Isla de Margarita, 2007. [Proceedings published by IEEE Computer Society Press]
 - 22) SÁ, Eveline J. V. ; TEIXEIRA, Jeane S. F. ; FERNANDES, C. T. **Towards a Collaborative Learning Flow Pattern using Educational Games in Learning Activities.** In: E-Learn 2007 World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, 2007, Quebec City. Anais E-Learn 2007.
 - 23) TEIXEIRA, Jeane S. F. ; SÁ, Eveline J. V. ; FERNANDES, C. T. **Digital Scenes of Pedagogical Use Using Learning Objects of the Educational Games Type.** In: E-Learn 2007 World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education, 2007, Quebec City. Anais E-Learn 2007.
 - 24) NORONHA, Robinson Vida; FERNANDES, Clovis Torres. **Identifying Phrases in Instructional Text Documents Using Instructional Objective and Goals.** Brazilian Journal on Computers in Education, 2006. [in Portuguese – Expanded version]
 - 25) MATOS, Simone Nasser ; FERNANDES, C. T. **Early Definition of Frozen and Hot Spots in the Development of Domain Frameworks.** In: Fourteenth ACM SIGSOFT Symposium on Foundations of Software Engineering, 2006, Portland, Oregon - USA. Proceedings - Doctoral Symposium, 2006
 - 26) MATOS, Simone Nasser; FERNANDES, Clovis Torres. **Defining the Architectural Design of Frameworks through a Group of Subframeworks Created from Frozen and Hot Spots.** In: ICSEA'06 – International Conference on Software Engineering Advances, Tahiti, French Polynesia, Oct 29 – Nov 01, 2006. [Proceedings published by IEEE Computer Society Press]
 - 27) OLIVEIRA, José M. P.; FERNANDES. **A Rationale for Conceiving Adaptation in Educational Adaptive Hypermedia Systems.** 2006 IRMA International Conference, Track: Web-Based Learning and Teaching Technologies, Washington, D.C., USA, May 21-24, 2006.
 - 28) NORONHA. R., V., FERNANDES, C.T. **Identifying Phrases in Instructional Text Documents Using Instructional Objective and Goals.** In: *Proceedings of SBIE'2005 – XVI Brazilian Symposium on Computers in Education*, Juiz de Fora, MG, Brazil, 09-11 nov. 2005. **[The Symposium Best Paper Award]**
 - 29) OLIVEIRA, José M. P.; FERNANDES, Eveline J. S.; NOGUEIRA, Liliane; MAIA, Daniel; TEIXEIRA, Jeane S. F.; FERNANDES, Clovis Torres; GALANTE, Douglas. **A Proposal for Modeling Learner Interaction in Educational Adaptive Hypermedia Systems Driven by an Instructional Model.** In: Proceedings of the 5th IEEE International Conference on Advanced Learning Technologies – ICALT'2005, Kaohsiung, Taiwan, July 5-8, 2005.
 - 30) NORONHA, Robinson Vida; FERNANDES, Clovis Torres. **Model to represent ill-structured problems in ITS environments.** In: *Proceedings of 8th IFIP World Conference on Computers in Education*, Cape Town, South Africa, July 4-7, 2005.

1.2 Qualitative and Quantitative Summary of Academic Production

| Nr. | Tipo | Total |
|-----|-------------------------------------|------------|
| 1) | Brazilian Didactic Book | 01 |
| 2) | Brazilian Journal Paper | 08 |
| 3) | International Book Chapter | 01 |
| 4) | Brazilian Book Chapter | 03 |
| 5) | M.Sc. Thesis Finished as Supervisor | 20 |
| 6) | Ph.D. Thesis Finished as Supervisor | 03 |
| 7) | International Conference Paper | 48 |
| 8) | Brazilian Conference Paper | 71 |
| | Total | 155 |

2.1 Thesis Supervision in Progress – Total: 08

PhD – 04; MSc – 04

3. 1 Other Information

List of Research Outcomes Adopted by Industries – Total: 04

1. Model and structure of hyphenation algorithm for Portuguese language – Implemented as part of a Grammatical Analyzer by ITAUTEC/Brazil and incorporated to Microsoft Office since 2000.
2. Model and methodology for developing hypermedia courses - **MONICA**, used by the firm CPT, from Viçosa, Minas Gerais, Brazil, since 1998.
3. Model and methodology for developing hypermedia courses - Daphne, used by Diebold/PROCOMP Electronics Inc. Brazil, 1996/1997.
4. Software Product: Training course for Maintenance Technician of Electronic Equipment – Hypermedia course developed to Diebold/PROCOMP Electronics Inc. Brazil, available as a CD-ROM, 1997.

Participation in Journal/Books: Editorial Review Board, Program Committee, Editorial Advisory Board – Total = 06

1. Member of the Editorial Board of IJoFCS - The International Journal of Forensic Computer Science (2006 – until now)
2. Member of the Editorial Advisory Board for the Encyclopedia of E-Collaboration: E-Collaboration in Modern Organizations: Initiating and Managing Distributed Projects (IGI Global: beginning in 2006, released in 2008)
3. Member of the Editorial Review Board of the IJeC – International Journal of e-Collaboration - a publication of IRMA - Information Resources Management Association, IGI Publishing, Kock N. (Ed.) [April/2004 – until now]
4. Member of the Editorial Board of the Brazilian Journal on Computers in Education – RBIE/SBC Brazilian Computer Society (Revista Brasileira de Informática na Educação) - (Dec/1996 – April/2005; August/2008 – until now) [in Portuguese]
5. Member of the Editorial Board of the Brazilian Journal Scientia (Unisinos: 2006 – until now)
6. Member of the Scientific Board for the Book Series “Hypermidiating”, Editora Ciência Moderna, Rio de Janeiro – RJ, Ulbricht V. R. (Ed.), (2005 – until now). [in Portuguese]

Participation in Congress/Symposium: International Program Committee – Total: 12 [Partial List]

1. Member of the International Program Committee of the CMC 2008 - Third International Conference on Concept Mapping, Tallin, Estônia, e Helsinki, Finlândia - September 22-26, 2008.
2. Member of the International Program Committee of the IEEE NSIA 2006 Network Security and Information Assurance Symposium, co-located with IEEE International Conference on Communications (ICC 2006) 11 – 15 June 2006, Istanbul, Turkey.
3. Membro do Comitê de Programa Internacional do 2006 IRMA International Conference, Track: Web-

Based Learning and Teaching Technologies, Washington, D.C., USA , May 21-24, 2006.

- Member of the International Program Committee of The 2008 Workshop on Advanced Computing for Critical Systems and EMergency Preparedness and Response. In: CSE 2008 – The 11th IEEE International Conference on Computational Science and Engineering, 2008, São Paulo – SP, Brazil.

Participation in Congress/Symposium: Brazilian Program Committee, Scientific Board, Track Chair, Session Chair – Total: 65 [Partial List]

- Member of the Program Committee of the SBIE'2009 - XIX Brazilian Symposium on Computers in Education, Florianopolis - SC, Brazil,18-20 nov. 2009.
- Member of the Program Committee of the SBSC 2009 – V Brazilian Simposium on Cooperative Systems, Fortaleza - CE, Brazil,27-29 outubro 2009.
- Member of the Program Committee of the WIE'2009 – XV Workshop on Computers in Education, Congress of SBC'2008, Brazilian Computer Society, Campinas - SP, Brazil,16-18 julho 2009
- Member of the Program Committee of the SBIE'2008 - XVIII Brazilian Symposium on Computers in Education, Fortaleza - CE, Brazil,12-14 nov. 2008.
- Member of the Program Committee of the WSWED 2008 – Second Workshop on Semantic Web and Education, in conjunction with SBIE'2008 - XVIII Brazilian Symposium on Computers in Education, Fortaleza - CE, Brazil,12-14 nov. 2008.
- Member of the Program Committee of the SBSC 2008 – IV Brazilian Simposium on Cooperative Systems, Vila Velha - ES, Brazil,27-29 outubro 2008.
- Member of the Program Committee of the WEI 2008 – XVI Workshop on Education Applied to Computing, Congress of SBC'2008, Brazilian Computer Society, Belém - PA, Brazil,15-17 julho 2008.
- Member of the Program Committee of the WIE'2008 – XIV Workshop on Computers in Education, Congress of SBC'2008, Brazilian Computer Society, Belém - PA, Brazil,16-18 julho 2008.
- Member of the Program Committee of the National Conference on Hypermedia Environments for Learning - CONAHPA 2008, São Paulo – SP, Brazil, 9-13 abril 2008.
- Member of the Program Committee of the SBIE'2007 - XVII Brazilian Symposium on Computers in Education, São Paulo - SP, Brazil,28-30 nov. 2007.
- Member of the Program Committee of the WSWED 2007 – First Workshop on Semantic Web and Education, in conjunction with SBIE'2007 - XVII Brazilian Symposium on Computers in Education, São Paulo - SP, Brazil,28-30 nov. 2007.
- Member of the Program Committee of the SBSeg 2007 – VI Brazilian Simposium on Security of Information and Computer Systems, Rio de Janeiro - RJ, Brazil,27-31 ago 2007.
- Member of the Program Committee of the WIE'2007 – XIII Workshop on Computers in Education, Congress of SBC'2007, Brazilian Computer Society, Rio de Janeiro - RJ, Brazil,4-6 julho 2007.
- Member of the Program Committee of the SBSC 2007 – IV Brazilian Simposium on Cooperative Systems, Congress of SBC'2007, Brazilian Computer Society, Rio de Janeiro - RJ, Brazil,3-5 julho 2007.
- Member of the Program Committee of the SBIE'2006 - XVI Brazilian Symposium on Computers in Education, Brasília - DF, Brazil, 08-10 nov. 2006.

Current Research Projects

| Title | Position | Funding Agency | Amount (USD\$) | Period | Type |
|--|------------------------|----------------|----------------|--|--------------------------|
| TIDIA-Ae Electronic Learning – Phase II (group of 20 Labs) | Principal Investigator | FAPESP | 565,000.00 | Oct. 1 st , 2006 Dec. 31, 2009 | Research and Development |

Completed Research Projects(1 USD\$ = R\$ 2,33)

| Title | Position | Funding Agency | Amount (USD\$) | Period | Type |
|---|------------------------|----------------|----------------|--|--------------------------|
| TIDIA-Ae Electronic Learning – Phase I (group of 15 Labs) | Principal Investigator | FAPESP | 31,078.26 | Sept. 1 st , 2004 June. 30, 2006 | Development |
| Web Payment System (ITA/IEC e MSD – firm) | Principal Researcher | FAPESP | 488,754.34 | Aug 1 st , 2004 | Research and Development |

| | | | | | |
|--|---|-------|------------|--|-------------|
| | and General Coordinator | | | Jan 31, 2006 | |
| PROTEM-CC-IE/CNPq – Education Via Internet (ITA/IEC, Mackenzie University and Mentor Tecnologia - firm) | Principal Investigator and Consortium General Coordinator | CNPq | 155,473.56 | Oct 1 st , 1999 Dec 31, 2001 | Research |
| HANDS-ON FINEP - Automation of the workflow of forensic lawsuits | Principal Investigator | FINEP | 27,280.00 | Nov. 1 st , 1998 Oct. 30, 2001 | Development |

Best PhD Thesis Award: "Execution Concepts and Models for Structural Communication Exercises ", by Robinson Vida Noronha, Supervisor Prof. Clovis Torres Fernandes, SBIE'2008 - XIX Brazilian Symposium on Computers in Education, 12 a 14/nov/2008, Fortaleza – CE, Brazil. [Area: Computers in Education]

Brazilian Didactic Book

FERNANDES, Clovis Torres. Introduction to Computing, Cosmodata Informática, São José dos Campos, SP, Brazil, 1981. [in Portuguese]