

OBJECTIVE

Summer internship position in the field of Software Engineering.

EDUCATION

Ph.D. in Information and Computer Science

University of California, Irvine (UCI)

09/2008 – present

Irvine, USA

Thesis Title Not defined yet.*Advisor* Debra Richardson and Andre Van der Hoek**M.S. in Computer Science**

Fluminense Federal University (UFF)

08/2004 – 11/2006

Rio de Janeiro, Brazil

Thesis Title Proposal and Evaluation of a Scalable Architecture for Internet TV Distribution.*Advisor* Prof. Célio Albuquerque**B.S. in Computer Science**

Federal University of Santa Catarina (UFSC)

03/2000 – 07/2004

Florianópolis, Brazil

Thesis Title A Tool for Convert Electrocardiogram Exams to the DICOM format.*Advisor* Prof. João Bosco Sobral**EXPERIENCE**

University of California, Irvine

Research Assistant

09/2008 - present

Irvine, USA

Project Name Lighthouse*Description* Lighthouse is an Eclipse plug-in that takes the conflict avoidance approach to coordinate developers. Lighthouse distinguishes itself by utilizing a concept called emerging design, an up to date design representation of the code, to alert developers of potentially conflicting implementation changes as they occur, indicating where the changes have been made and by whom.*Environment* J2SE, XML, ANT, SWT, Hibernate, MySQL, Eclipse RCP/Plugin*Responsibilities* Research of (a) the applicability of Emerging Design to project management, and (b) determination where the implementation is diverging from the original design (design decay).**Siemens Corporate Research (SCR), Inc.**

Software Engineer Intern

11/2006 – 04/2008

Princeton, USA

Project Name TDE (Test Development Environment)*Description* TDE/UML is a tool developed by SCR to deliver the results of the model based testing research. The tool has been successfully used on several Siemens products to reduce the effort to create and maintain system and integration tests. The tool is available as a standalone tool or as a plugin to the open source tool Eclipse.*Environment* J2SE, XML, ANT, SWT, GEF, Draw2D, Eclipse RCP/Plugin*Responsibilities* Research of (a) better visualization of models, (b) efficient test case generation and (c) derivation of executable test case.

Fluminense Federal University (UFF)
Master's Student / Research Assistant

08/2004 – 11/2006
Rio de Janeiro, Brazil

- Project Name* TVoIP (TV over IP) - M.S. Thesis
- Description* This research project deals with the problem of building a multicast tree in an Internet TV scenario. As a solution, it was proposed a P2P network based architecture (TVoIP) in which clients receive and forward the video content, generating a distribution tree whose purpose is to perform application-level multicast communication in an efficient manner.
- Environment* C++, TCL, sed, awk, shell script, linux, ns-2, BRITE, GT-ITM
- Responsibilities* Responsible to create and evaluate the architecture using simulation. This involved research in the following areas: (a) P2P architectures, (c) overlay networks, (b) minimum spanning tree algorithms, (c) application layer multicast and (d) video distribution.
- Project Name* CISBTVD (Return Path for Brazilian Digital Television System)
- Description* Research project using wireless routers to build mesh networks as the infrastructure for interactivity channel for Brazilian digital television system.
- Environment* Linksys WRT54G, OpenWRT, Linux, Shell Script, ad hoc, AODV, OLSR
- Responsibilities* Responsible to build the mesh network prototype. Also, I created a customized OpenWRT Linux distribution with AODV and OLSR routing algorithms to replace the Linksys firmware in order to make the router capable to join the mesh network.

Epeople Solutions
Software Engineer

08/2001 – 07/2004
Florianópolis, Brazil

- Project Name* Clinicontrol Image
- Description* Clinicontrol image is a viewer and image processing software for DICOM images produced by medical equipment. It is able to receive images from any PACS or medical imaging modality using DICOM communication protocol (STORE SCP, STORE SCU, Query/Retrieve).
- Environment* Delphi, Interbase, DICOM
- Responsibilities* Development of visualization modules, image processing tools and the DICOM library.
- Project Name* xml2dcm
- Description* A tool to converts the ECG exams stored in a XML file to a DICOM file. The XML document was defined using XML Schemas.
- Environment* J2SE, XML, Schemas
- Responsibilities* Development of entire tool, including definition of XML Schemas and implementation of the DICOM library.
- Project Name* RCPE (Santa Catarina's Network of Education Researchers)
- Description* Web Portal to help researchers to develop study and research in the education field.
- Environment* JSP, Struts, PostgreSQL, Javascript
- Responsibilities* Development of calendar, storage, forum and group management modules.

Santa Catarina's Federation of Industries (FIESC)
Consultant in Software Engineering

10/2003 – 06/2004
Florianópolis, Brazil

- Project Name* SESI WebStat
- Description* Web application for management of production statistics about Santa Catarina program of worker's education.
- Environment* ASP, Javascript, SQL Server
- Responsibilities* Design and development of the persistent layer and session/authentication modules.

Estácio de Sá University 04/2004
Consultant in Software Engineering Florianópolis, Brazil

Project Name College's Online Evaluation
Description Web application designed to help the students to evaluate the resources (professors, equipments, infrastructure, buildings, etc) of the college.
Environment JSP, J2SE, SQLServer
Responsibilities Design and development of business and persistence layers.

Estácio de Sá University 02/2004
Consultant in Software Engineering Florianópolis, Brazil

Project Name Intranet Website
Description Web application to access the student's personal file storage in a Windows-based network.
Environment JSP, J2SE, openLDAP, Samba, SMB/CIFS
Responsibilities Design and development of presentation layer, LDAP authentication and SMB/CIFS access modules.

Estácio de Sá University 10/2003
Consultant in Software Engineering Florianópolis, Brazil

Project Name Automatic Generation of Interdisciplinary Exams
Description Web application to generate online exams for the students according to the classes they are attending.
Environment JSP, J2SE, SQLServer
Responsibilities Design and development of business and persistence layers.

Estácio de Sá University 06/2003
Java Instructor Florianópolis, Brazil

Course Name Introduction to Java
Type Extension Course
Objectives

- Object-Oriented Programming Concepts;
- Language basics (variables, arrays, data types, operators, and control flows);
- Essentials of Java class library;
- Introduction to Graphical User Interface (GUI).

Federal University of Santa Catarina (UFSC) 08/2000 – 12/2002
Software Developer / Research Assistant Florianópolis, Brazil

Project Name CeramicaBrasil
Place Material Engineering Lab (LabMat)
Description Web Portal to provide scientific and technical information about new technologies, products and services for ceramic industry.
Environment PHP, MySQL, Javascript, Linux, Apache, Sendmail, Mailman, Samba
Responsibilities

- Development of the core modules of the web portal using PHP;
- Network Failure detection/resolution;
- Elaboration/deployment of network security policies;
- Servers and network services administration.

PUBLICATIONS

Célio Albuquerque, Tiago Proença e Etienne Oliveira. TV sobre IP - Arquiteturas para Transmissão em Larga Escala (Translation: TV over IP - Architectures for Transmission in Large Scale). *SBRC 2006 Mini-course*, Chapter 3, May 2006. (Book Chapter)

Tiago Proença and Célio Albuquerque. Proposta e avaliação de uma arquitetura escalável para distribuição de TV na Internet (Translation: Proposal and Evaluation of a Scalable Architecture for Internet TV Distribution). In *Brazilian Symposium of Computer Networks (SBRC)*, May 2007. (Conference Proceedings)

Tiago Proença. Proposta e avaliação de uma arquitetura escalável para distribuição de TV na Internet (Translation: Proposal and Evaluation of a Scalable Architecture for Internet TV Distribution). *Fluminense Federal University*, 76 pages, 2006. (M.S. Dissertation)

Tiago Proença. Uma ferramenta para conversão de exames de eletrocardiografia para o formato DICOM (Translation: A tool for convert electrocardiogram exams to the DICOM format). *Federal University of Santa Catarina*, 84 pages, 2004. (B.S. Dissertation)

Tiago Proença. A Scalable P2P Architecture for Internet TV Distribution. In *Siemens Software Engineering Conference (SSEC)*, June 2007. (Poster)

Tiago Proença. Usando J2ME para acessar serviços na Web (Translation: Using J2ME with web services). In *Workshop on Web Services (WWS)*, November 2003. (Talk)

HONNORS AND AWARDS

| | |
|---|-------------------|
| Ph.D. Fellowship granted by ICS-UCI to support graduate research | 09/2008 – 04/2010 |
| M.S. Scholarship granted by FUNCAMP to support graduate research | 05/2005 – 04/2006 |
| B.S. Scholarship granted by FEESC to support undergraduate research | 08/2000 – 12/2002 |

OTHER ACTIVITIES

B.S. Dissertation Committee

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|---|------|
| Arthur Granado and Alexandre Carapiá. Análise e Implementação de Arquiteturas para Conferências Multimídia (Translation: Analysis and Implementation of Architectures for Multimedia Conferences). <i>Fluminense Federal University</i> | 2006 |
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Reviewer

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| Brazilian Symposium of Computer Networks (SBRC) | 2006 |
| IEEE International Conference on Communications (ICC) | 2005 |

Events

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| Member of Organization Committee in the Workshop on Web Services (WWS) | 2003 |
| Volunteer in The Role of Software Architecture for Testing and Analysis (ROSATEA) | 2007 |

SOCIETIES

Member of the SBC (Computer Brazilian Society)

SKILLS

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| <i>Application Development</i> | C/C++/C#, Delphi, Java, Visual Basic, XML, shell script, awk, sed |
| <i>Web Development</i> | ASP, JSP/Servlets, PHP, Javascript, VBScript |
| <i>Mobile Development</i> | J2ME CLDC/CDC, .NET Compact Framework |
| <i>Databases</i> | MySQL, PostgreSQL, Interbase/Firebird, SQL Server |
| <i>Operating Systems</i> | Windows, Mac OS X, Unix-like |

REFERENCES

Dr. Marlon Vieira

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Dr. Célio Albuquerque

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Dr. Andre Van der Hoek

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