DANIEL CIOI

www.cioi.ro
email: click on it
+40(723)037675

EMPLOYMENT

Senior Java Developer, Nagarro SRL, October 2019 - present

Senior Java Developer Team Lead, SSI Schaefer SRL, January 2018 - October 2019

Senior Java Developer, SSI Schaefer SRL, August 2016 - December 2018

Java Developer, SSI Schaefer SRL, July 2011 - July 2016

Freelance Java Developer, October 2010 - June 2011

Post-doctoral Associate, Rutgers University, CAIP, Piscataway, NJ, USA, May 2008 - August 2010

Research/Teaching Assistant, Polytechnic University of Timisoara, Mechanical Engineering, Mechatronics Department, Timisoara, November 2003 - March 2008

EDUCATION

PhD degree in Computer Science, (Virtual Reality for Computer Aided Design), Polytechnic University of Timisoara, Timisoara, Romania, March 2008

Dipl. Eng. Polytechnic University of Timisoara, Mechanical Engineering, Mechatronics Department, Industrial Robots, Timisoara, 2003

FOREIGN LANGUAGES

English (read/write/talk): well

FIELDS OF INTEREST

Java programming (desktop applications, Swing, SWT, JAI);

Web development (EJB, REST, Servlet, JSP, GWT, PHP, HTML, XML, JSON);

Frameworks (Hibernate, Spring and Spring Boot, WAMAS 5, ACX 3.X, 4.X, Junit, TestNG, Mockito, EasyMock, Squish);

Tools (Eclipse, IntelliJ, Postman, ArgoUML, Maven, Gradle, Ant, CVS, SVN, CVS, Git, Gerrit, Bitbucket, Jenkins, Confluence, Citrix Workspace, Jira, Bugzilla);

Servers and platforms (Apache, Tomcat, JBoss, OSGi, Docker, Kubernetes, Microservices);

Databases and BI (Oracle, MySQL, PostgreSQL, Microsoft SQL Server, H2, JasperSoft, Custom proprietary Business Intelligence);

Computer-aided design (CAD);

Virtual Reality (Java3D, VRML, X3D, Visual Python); Custom hardware and software development in: CAD systems, medical rehabilitation;

System and Network Administrator: Unix (FreeBSD, OpenBSD, HP-UX, Solaris), Linux (Ubuntu, Centos, Redhat, Suse, Gentoo, Knoppix);

Document typesetting: LaTeX.

OPEN SOURCE PROJECTS

VRforCAD, JQuadRobot (member), getHum&Temp, JGscreenRemoval, JcsPhotoGallery

PROFESSIONAL AFFILIATIONS

Member of the IEEE (Robotics and Automation Society, Computer Society)

Robotic Society of Romania

Toastmasters International

SCHOLARSHIPS

Scholarship CEEPUS (RO-124-04/05), Viena University of Technology, Institute for Handling Device and Robotics, 01.03.2005 - 30.04.2005, Austria

Scholarship CEEPUS (RO-0124-03/04), Slovak University of Technology, 05.04.2004 - 30.04.2004, Bratislava, Slovakia

PATENTS

20090131225 REHABILITATION SYSTEMS AND METHODS - Grigore C. Burdea, Amine Arezki, Mourad Bouzit, Daniel Cioi, Manjuladevi Kuttuva, Devin Fensterheim - Princeton, NJ, US

RESEARCH ACTIVITIES

Rutgers Ankle (a rehabilitation system, part of the Tele-rehabilitation System with Virtual Force Feedback project. Rehabilitation of the patients with stroke or cerebral palsy interacting with a robot exercising their ankle in an interactive virtual environment

Rutgers Arm II (a rehabilitation system that trains primarily shoulder motor control, arm dynamic response, endurance and cognitive anticipatory strategies in virtual environments)

Grant 694 CEEX, Collaborative Virtual Reality Environment for the Pre-Surgery Planning in Orthopaedics (ConMec), 2006/2008 (24 months) - member

Grant 1612 CEEX nr.88, The development and implementation of some investigation and rehabilitation systems for the spinal column deformations to school age population and professional categories with sedentary activities (INBIRE), 2006/2008 (28 months) - member

Grant 2799 CEEX, Optimisation of the energetic potential of waste for clean energy generation in Romanian industrial facilities (OVAPED), 2006/2008 (24 months) - member

Grant 4293 CEEX, Advanced pneumatic systems for precise action in robotics and other industrial applications based on new types of proportional servo-systems in mechatronics conception (SPASERVODIST), 2006/2008 (25 months) - member

Grant 112 CEEX II 03, Simulation, Control and Testing Platform with appilcations in mechatronics (ConMec), 2006/2008 - member

Grant CNCSIS 83, Virtual Reality for Computer Aided Design, 2006/2007 (19 months) - director

Grant CNCSIS 343, Intelligent CAD for devices personalization of skeleton deficiency adjustment, 2006/2007 (16 months) - member

Grant 320 CEEX, Magnetic and optical tunable nanomaterials with controlled porosity obtained by sol-gel method and sono-synthesis, potentially applicable in environmental protection, biology and medicine, 2005/2007 (27 months) - member

Grant 21 CEEX I 03, Researches regarding the possibilities of using robotic system with the purpose of increasing the technico-economical competitiveness of the romanian industry, 2005/2007 (26 months) - member

The 6th FP of the European Commission - Skill-based Inspection and Assembly for Reconfigurable Automation Systems, (SIARAS) STREP NMP2-CT-2005-017146, 2005/2008 (36 months) - member

Grant CNCSIS 8/162, Develop a Mechatronic laboratory, open and remote, 2004/2005 (12 months) - member

PUBLICATIONS

Cioi D., A. Kale, and G. Burdea. Rutgers ankle CP the new robot controller design. In preparation.

Cioi D., A. Kale, G. Burdea, J. Engsberg, W. Janes, S. Ross. Ankle Control and Strengthening for Children with Cerebral Palsy using the Rutgers Ankle CP - A case study. 2011 IEEE International Conference on Rehabilitation Robotics, Zurich, Switzerland, June 2011; pp. 654-659.

Burdea G., D. Cioi, J. Martin, B. Rabin, A. Kale and P. DiSanto, "Motor Retraining in Virtual Reality: A Feasibility Study for Upper-Extremity Rehabilitation in Individuals With Chronic Stroke", Journal of Physical Therapy Education, Vol 25, No 1, Winter 2011:20-29.

Burdea, G., D. Cioi, J. Martin, D. Fensterheim, and M. Holenski, "The Rutgers Arm II Rehabilitation System - A feasibility study", IEEE Transaction on Neural Systems and Rehabilitation Engineering, 2010;18(5):505-514. PMID: 20529757.

Cioi D., G. Burdea, M. Holenski, The Rutgers Arm II Rehabilitation System - Case Series, Proceedings of Virtual Rehabilitation 2009 International Conf, pp. 221, Haifa, Israel, July 2009.

Vatau Steliana, Cioi Daniel, "Graphical User Interface for Quadruped's Leg Robot", ISI Proceedings of The 19th International DAAAM Symposium "Intelligent Manufacturing & Automation: Focus on Next Generation of Intelligent Systems and Solutions", 22-25th October, 2008.

Vatau Steliana, Cioi Daniel, "JROBO: Simulation and control with Java for Quatruped Robot", ISI Proceedings of The 19th International DAAAM Symposium" Intelligent Manufacturing & Automation: Focus on Next Generation of Intelligent Systems and Solutions", 22-25th October, 2008.

Burdea G., D. Fensterheim, D. Cioi and A. Arezki, "The Rutgers Arm II Rehabilitation System", Proceedings of Virtual Rehabilitation 2008, pp. 76, Vancouver Canada, August 25-27, 2008 (poster session).

Daniel Cioi, "A Java3d Application for Visualization and Deformation of Cad Models in Virtual Reality", ISI Proceedings of The 18th International DAAAM Symposium "Intelligent Manufacturing & Automation: Focus on Creativity, Responsibility and Ethics of Engineers" (Croatia, Zadar, 24-

27th October 2007): pp 153-154.

Steliana Vatau, Daniel Cioi, Radulescu Corneliu, "Mechanical design of a hip joint for an anthropomorphic leg", ISI Proceedings of The 18th International DAAAM Symposium "Intelligent Manufacturing & Automation: Focus on Creativity, Responsibility and Ethics of Engineers" (Croatia, Zadar, 24-27th October 2007): pp 801-802.

Daniel Cioi, "Interchanging Three-Dimensional Models Between CAD and VR System", Proceedings of PRASIC'06, Simpozionul national cu participare internationala Proiectarea Asistata de Calculator, Vol. III - Design de Produs (Brasov November 09-10, 2006): pp 61-64.

Daniel Cioi, "Collision Detection in Virtual Reality", Proceedings of ROBOTICA 2006, The 3rd International Conference on Robotics (Iasi September 07-09, 2006): pp 151-154.

Daniel Cioi, "Haptic Devices for Computer Aided Design", Proceedings of COMEFIM'8, The 8th International Conference on Mechatronics and Precision Engineering (Cluj-Napoca June 8-10, 2006): pp 883-888.

Daniel Cioi, "Comparison of 3D Stereoscopic Visualization Devices", Proceedings of COMEFIM'8, The 8th International Conference on Mechatronics and Precision Engineering (Cluj-Napoca June 8-10, 2006): pp 669-674.

Daniel Cioi, "Robot Simulation using Java 3D", Proceedings of OPTIROB 2006, 1st International Scientific Meeting "Optimization of the Robots and Manipulators" (Predeal May 26-28, 2006): pp 57-59.

Daniel Cioi, Steliana Vatau, Inocentiu Maniu, "Virtual Reality Laboratory for Robot Systems", Proceedings of SACI 2006, 3rd Romanian-Hungarian Joint Symposium on Applied Computational Intelligence (Timisoara May 26-26, 2006): pp 634-641.

Daniel Cioi, "Virtual Reality for Computer-Aided Design", The International Journal Robotica & Management, Vol.10, No.2 (December 2005): pp 46-48.

Daniel Cioi, "Virtual Reality Modelling for Educational Robot Systems", Proceedings of RAAD'05, 14th International Workshop on Robotics in Alpe-Adria-Danube Region (Bucharest May 26-28, 2005): pp 225-228.