



# Océ Software



## Summer Internship Projects 2011



No.	Project Title	Brief Project Description	Technical Skills Required	Department	Project Coordinator
1 DP	<b>Code Augmentation using Code Contracts</b>	Relevant sections of the code can be augmented using code contracts which allows for greater readability and easier discovery of errors at runtime. Also this allows a number of static checks of the code.	.NET/C#	DP	Valer BOCAN
2 DP	<b>Nature-inspired algorithms applied in Software Testing - SBC</b>	Nature-inspired algorithms such as the Simulated Beehive Colony (SBC) may prove useful in testing components with a large combination of in/out parameters and where exhaustive testing is impossible.	.NET/C#	DP	Valer BOCAN
3 DP	<b>Variable Data Printing (VDP) using PDF forms</b>	On-the-fly generation of PDF files driven by database lists and commercially or freely available PDF producers.	.NET/C#	DP	Valer BOCAN
4 DP	<b>Parallel programming in multicore environments</b>	Using the Task Parallel Library (TPL) to create multicore-aware programs and creating benchmarks to show the speed gain over different architectures.	.NET/C#	DP	Valer BOCAN
5 DP	<b>Server design based on asynchronous sockets</b>	Creating an asynchronous architecture that scales well for incoming requests that may require a significant amount of time to process.	.NET/C#/Sockets	DP	Valer BOCAN
6 PP	<b>Production Printing Technical Investigations</b>	Connect Reporting generators via JBoss, Maven 2 configurations	Java	PP	Peter ULLRICH
7 PP	Production Printing Server evolutions	Migration from 32 to 64 bit environments	Java	PP	Peter ULLRICH
8 PP	<b>Production Printing Converters</b>	Evaluation of 3rd party converters: install, integrate, run stability tests, evaluate deviations	Java	PP	Peter ULLRICH
9 TaV	<b>Smart Raster Comparing Tool</b>	Create a tool able to detect differences between 2 raster files visually identical. The Tool specification includes, among others: edge-detection capability, edge alignment, detection and modification of polygon filling patterns, font rasterisation differences detection.	Any language adapted for graphics manipulation	TaV	Cristian OROS
10 ESW	<b>Automated test development for Java GUI, using state-of-the-art mockups and UI-testing frameworks.</b>	The new graphical user interface empowers the outstanding VarioPrint digital photocopier, document scanner and multifunctional cutsheet in one compact, productive package. It allows operator to have an overview on the printing schedule, manage list of jobs and paper, perform quality wizards and regular maintenance jobs. The user interface is developed in Java Swing with a customized set of widgets adapted for touch-screen.	Good Java, preferably also good Swing	ESW	Eduart BUNAS
11 ESW	<b>Automated test development for Power Logic Controller in TCL/TK</b>	The Océ Power Logic controller deals with print files processing, enabling simultaneous, multi-user printing, copying and scanning. It supports all standard file formats, so print jobs can be sent from any location, giving feedback on printer and job status.	Good programming skills (selection test will be in the programming language chosen by the candidate)	ESW	Ruxandra BABIUC
12 ESW	<b>Test execution for Power Logic Controller</b>	You will test the good implementation of new features and non regression on Power Logic Controller. For that you will have access to some of the best printers available on the wide format technical documents printing market.	Interest and some knowledge in image processing & printing; good programming skills are a plus	ESW	Ruxandra BABIUC