



Marius Predut

(Bucharest, 38 Years, M)

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- ✓ I have a driving license
- ✓ Available for relocation
- ✓ Interested in part time offers / projects
- ✓ Available for business trips

Spoken languages

English (Advanced)

Positions / Professional skills

Drivers

Algorithms

Image Processing/Computer Vision/Machine Learning

Linux kernel

OpenGL

c/c++/c#



EXPERIENCE

March, 2013 - January, 2017

Graphics Software Engineer (Engineering) @ INTEL Corporation, București

1. Google chromium project (Chrome browser and ChromeOS) focused on graphics stack.
 - Patent submission with title: A Fast Multi-Task Real-time Scheduling Algorithm.
2. Intel graphics open source drivers (OPEN GL, GLES, EGL 3D mesa/drm/dri drivers). Linux kernel/driver debugging.
 - deep understood anti-aliasing algorithms (CMAA, SMAA/MLAA).
3. Android graphics stack (hardware composer driver).
4. In my spare time I developed a plain http web server using C# and I also I worked on a printer management monitor - research project.
5. From 2017 : Start working on image processing project available github.
 - Image Enhancement for better OCR results .
 - Controls detection on print screen images.

October, 2012 - March, 2013

Software Engineer (Engineering) @ IBM ROMANIA SRL, București

Linux embedded on IBM Blade Servers. Work on management software development, added a new feature to enable adding/removing blades on running.

December, 2011 - October, 2012

Software Engineer - Bioinformatics (Engineering) @ SIEMENS PSE SRL, Brașov

The Job involve DNA sequencing alignment (Burrows–Wheeler transform, Prefix trie and string matching). Also it assumes working with huge data, parallel processing (Hadoop) and cross platform development (windows/Linux, Java and C++).

April, 2011 - October, 2011

Software developer - contractor fixed period (IT / Software) @ Texas instruments, Villeneuve-Loubet, Provença-Alpi-Coasta de Azur, Franța

Achievements:

1. Silicon validation on OMAP5 architecture - image processing part. Algorithms validation. Validation of Still Image COProcessor (SIMCOP), ISS, CSI interfaces.
2. Remote projects for others (SmartName company): unmanned air vehicle simulator, unobtrusive email spammer.

August, 2010 - March, 2011

TEAM LEAD - IMAGE PROCESSING – full time contract (Engineering) @ INTEL Corporation(Movidius), Timișoara

Researcher and developer in 3D-image processing fields.

Lead a team of 4 members.

The prototypes (algorithm model) that have been proved on PC are implemented on embedded device (DSP, ARM).

As result of my work now I am owner of Patent Pending.

Achievements:

Given images (a pair) taken from two cameras at points A and B, with parallel axes, where we know the approximate distances between the two cameras.

1. Find a kind of solution for detect angle and zoom for a pair of images. For this I wrote an algorithm that is in a stage of Patent Pending. It already bypass patent office managers gate.
2. Produce a new virtual image that is taken from a camera located on a line between

A and B.

3. Analyze a better solution for color correction/calibration in video stream.

The keywords of projects are: Stereo alignment; stereo matching; false positive match; stereoscopic view; Epipolar geometry.

January, 2009 - August, 2010

Contractor Software Developer & Engineer (IT / Software) @ LMS Brasov, Payzone and IXIA Bucuresti, București

LMS:

The company' software profile including structural integrity, system dynamics, handling, safety, reliability, comfort and sound quality for automotive and other advanced manufacturing industries.

Created new automation (COM) interfaces for 1D-3D structure simulation module. It supposed interaction with C++, COM design pattern technology in creating interfaces and CATIA framework-engine created by DASSAULT.

Payzone:

Developed the following:

1. POS Terminal simulator for loading electronic bill payment and mobile cards (C/C++ Windows and Unix/CentOS).
2. Update transaction server for electronic bills payment (C/C++, PostgreSQL, Unix/CentOS) .
3. Pin migration application for 40 mobile operators (C/C++, PostgreSQL, Windows).
4. A new version of terminal software for PC (C#/Linux/Ubuntu).

It involve notions of encryption/decryption, terminal protocols (EBCD, BCD, MAC), Format conversions, design C/C++, C#.

IXIA:

Creating protocols stack plug-ins for 3G (GTP) and 4G(LTE) used on testing last generation telecommunication equipment. Embedded/PC with Linux and Windows(C/C++/C#).

January, 2007 - January, 2009

TEAM LEAD - IMAGE PROCESSING / ALGORITHM DEVELOPER (Engineering) @ EVOSOFTWARE SYSTEMS SRL, București

Responsibilities: R&D in image processing and recognition, an innovative software that automatically recognizes and reads information from documents and collects data and structures. It suppose advanced and novel algorithms and performance optimization.

Lead a team with three members. The result distinguishes by product FORMIC FUSION from UK.

In development process I use currently C/C++ with STL. Also we use COM, C#, VB6. I also worked on a software product (aspx.dot net) for internal use management judicial Dacia- Renault.

February, 2005 - January, 2007

Senior software developer (IT / Software) @ SOFT-NET (eServGlobalTelecom), Bucuresti, București

Contribution to the development and maintenance of a major modules component of medium scale server-side, in Mobile telephony services for Egypt operators (Mobinil) project.

Software developed using C++/Informix on Solaris UNIX platform (Sparc).

Utilization of the platforms: BPM - batch platform modules, PSI - aggregates computing modules, SDP - service data point modules.

Responsibilities: coding of new modules/features, write technical specification.

Maintenance: analyzing and solving issues reported by customers, detection of

scenarios that reproduced problems from field, code review, documenting of the code, writing documents for test team - test plan document, unitary testing, cooperation with specification and requirements teams.

Production of optimizations and code refectory in order to solve customer issues and improve product performance, contributed to the training of newcomer developers.

March, 2004 - January, 2005

Senior software developer (IT / Software) @ IPDEVEL, București, Municipiul București, România

1. Client-Server application for internal employees' activity management.
2. Part of the team developing a Time & Attendance application called Astrow, for AMANO Company. The employees are bound to use the terminals in order to indicate the various current statuses. (VB, C#).
3. PcFinder for the Danish GIGASOFT company. The application is developed in C++/ASP and required networking, protocol, windows services knowledge.
4. Stamps com API interface involves integration of the Active X controls from Stamps.com within the US customer's website.
5. SMPPro for an American company. The application allows the synchronization of data concerning the offline users with the online web server through https.

August, 2003 - March, 2004

Junior Programmer (IT / Software) @ ONSAT-IT, București

1. Management of promotional products for Johnson Wax.
2. Mutual investment funds for BCR Asset Management

November, 2002 - August, 2003

Consultant Software and Programmer (IT / Software) @ Ager, București

Bringing up-to-date/ modifying/ adding/ repairing/ installing "ProfitIT" ERP modules. The client was developed using Access/VBA/VB and the server was SQL SERVER. Create cubes with the OLAP on the SQL Server and swivels in Excel for data analysis.

November, 2002 - November, 2002

My projects (IT / Software) @ Other projects, București, România

Developed 3D Graphics applications, AI-ComputerVision, and applications on combinatorial and formal language theory + other utilities .

Studied arhitecture of Windows 95 OS(interruptions, DPML specification functions, IOCTL interface, TSR / DxV drivers, FAT16/32, Broadcast interface API functions using the BIOS level, BIOS interruptions (for sectors, tracks, heads, logical sectors, clusters)

Developed an application for ANIMMC (The National Agency for Small and Medium Enterprises), a Romanian government institution.

GEONET and BLOMINFO cartography/geodesics - Software management staff allowances.

APARATAJ Titu - Wizard Software to export a wage information from an internal accounting software used internally in a general format required by the Labor Inspectorate.

AGROSTAR unions/organizations - Software used for management activity.

Created the sites apicola.jp, casaideala.wordpress.com, purehoney.ro, etc

Volunteering: three volunteer programs, involving educational activities for orphans and for poor children in Namibia. Also in Ploiesti at "Bethezda" school.



EDUCATION

1998 - 2002

University of Sciences - Math-Info section - Mathematics @ University (graduate)

In 2002 I graduated the Faculty of Mathematics, section computer sciences. My graduation project was "A limited C interpreter", for which I obtained the maximum grade. During the University I also attended for three years the automatic section of engineering university, (1997 – 2000) and I froze it in fourth year, resumed in 2009.

1997 - 2010

University of Electrical Engineering - Automatic, Computers @ University (graduate)

In 2010 I graduated the University in Engineering - computers /automatic domain. My graduation project was "Computer Vision - Face detection", for which I obtained the maximum grade.

1994 - 1998

College "Ienechita Vacarescu" - Computer Science @ College / Postgraduate studies

In 1997 I graduated the computers's school department with the project "Programming Techniques Branch and Bound" for which I obtained the maximum grade.