

# Sabin Belu

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Bucharest, Romania



## S U M M A R Y

As software developer, Team Leader and Project Manager, implemented challenging algorithms into large projects and automated the design, implementation and testing phases, using advanced language tools and techniques. Created innovative products, tools, algorithms, etc;

## P R O F E S S I O N A L E X P E R I E N C E

***Luxoft Professional ROMANIA SRL, Bucharest, RO, Apr 2015 – present***

### ***Project Manager***

What first started as a 5-Developer Team soon grew to become HARMAN CPM BMW System-Functions Team, counting 22 FTEs as of today, 2 engineers joining soon and 5 more engineers to be hired, as part of the new MGU AutoSAR team

*As Project manager of BMW System-Functions Team, which comprises of Logistics, NBT Evo, Kisu, luk RAM, Testing and MGU Team, my responsibilities include, but are not limited to:*

**Hiring: RampUp of new employees** - UDS Presentation (Diagnosis), BMW Tools Presentation (Ediabas, ESys, TerraTerm, DLTViewer, MoCCa, Ram/NbtEvo/MGU project, **Creation** of MoCCa samples (ex: Client/Server)

**Perforce** course, **Perforce** project integration, **Perforce** submits, **Perforce** CLs review, **Perforce** Branching

**Documentation:** Project related documentation, **Rampup** relates docs, **Team** related docs, **DMR** - Delivery Maturity Reviews, **ASpice** - Automotive Spice Preparations

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**Interviews:** PMI - Project Manager Interviews, **Startup** salary negotiation, **Technical Interviews** - Regular/Seniors

**Integration:** *Front runner for Binary Release Automatization:* **Binary** Release Emails creation, **Template** set up, **Emails** setup, **Git Label**, **Git branch**, **Target Configuration** setup - new vtb setup, **Binary** Release label verification/submittal, **PDX** Creation and automatization

**Development:** **MoCCa** components, **HBDC** updates (new diagnosis jobs), **Fix** compilation issues, **Fix** linking issues, **Ticket** analysis, **DLT Traces** & miscellaneous **MoCCa** libraries integration

**InterTeams Cooperation :** **Technical Interviews**, **MoCCa** presentation / trainings, **Miscellaneous** meetings

**Management:** **Project Reports** (Evo, MGU, RAM), **Project Related tasks:**, **Ticket** management, **Jira** Tasks management, **Daily** meetings/updates, **Weekly** updates to Management, **Financial Reports** (Luxoft), **Initial Salary** negotiations, **PA** and **PP** salary negotiations, **CM** supervision

*Also, as Project Manager I look very closely to our team's CM and other financial statements, taking good care of the teams' budgets, travel, expenses, courses, salaries, interviews, hiring, PAs and PPs*

*I supervise the sending of all financial and project related requests to Clients*

*Bringing in new business for the company was something I've wanted to achieve from the start, thus increasing our project money intake*

*I think the new AutoSAR Team which will bring in 9 new people (4 already hired), is a recognition of the entire four years of great work, always up-to-date releases, never-late deliveries and on time & on budget fixes*

**Luxoft Professional ROMANIA SRL, Bucharest, RO, Nov 2012 – Apr 2015**

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**Team Lead Diagnosis Team / Automotive Division**

*In charge of the Diagnosis Team, responsible for implementing a higher layer of Diagnostic functions over an existing and proprietary **automotive** framework; organized and set up procedures to accommodate and start development of new software versions and also support old software versions by using a ticket based management system, called Elvis*

**In charge** of weekly deliveries to the customer; this includes binary files to be delivered and submitted to version control servers using Perforce, and all associated emails and report files along with complete test results

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**Distribute** development tasks directly from the FO to the team, in the form of tickets (problem reports) and CRs (features or change requests) and responsible for each team member workload; distributed testing tasks to the two testers, either change request tests, or open tickets

**Responsible** for weekly releases, build fixes, ticket and CR fixes submitted to Perforce, trace analysis, DMC/DST failed tests analysis which included log traces

**Reviewed** each report and email that was sent out to the customer

Reported weekly to Luxoft using numerous excel report files that include daily activities for each team member

Also responsible for new team members' set up, growth, ramp-up and continuous development

**Software Implementation** Challenges/Tasks:

- Maintenance of old source code
- Maintenance of old binary release system
- Managed HW resources and most difficult software tasks
- Lead the development of new binary release system and new software requirements

**Management** Challenges/Tasks:

- Organized and brought together the new team
- Added new procedures for maintenance and bug-fixes
- Created the steps for better reporting of results
- Kept always in touch with the customer, making sure that our results match his expectations in terms or quality of the deliveries and deadlines

**Overall** Challenges

- Improved team responsiveness and cohesiveness for better and quicker responses to immediate customer requests
- Always delivered in time with the expected quality

**CONTINENTAL Automotive SRL, Timisoara, RO**

**Dec 2011 – Nov 2012**

*C/C++ Developer on Embedded Systems*

*Worked on a multi-million dollar project for well-known German automaker*

Created a analyzer tool which automatically filtered all other traces and dump crucial information about the System

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For Connection Master, the tool emphasized on traces of:

- Source Activity of different sources (AM/FM, CD/CDDA, SD, USB, etc)
- Messages sent and received thru MOST
- Connectivity from different source
- Different errors from sources
- Sound driver connectivity errors (i2c bus, dirana connection errors, etc)
- AUD Level dumps

Created a highly advanced Filter Analyzer tool, which implemented different parsing algorithms, such as recursive descent parsing regular expression analysis, dijkstra shunting yard algorithm

Proposed different ideas filed under **Continental Idea Management** system

The level of problems increased and the time needed to provide solution decreased every time the moment the deadline approached

Different deadlines for different software versions, mostly 4 brand-related software versions

Used different compilation and source code branching to switch the code and create custom software versions for each brand

*Environment: Visual C++ 10.0, Renesas Tools, IBM Tools, AMD CodeAnalyst, Intel VTune*

**Continental Recruiting Agency, Timisoara, RO**  
*C/C++ Developer on Embedded Systems*

**Apr 2011 – Dec 2011**

*Contract work for Continental Automotive SRL*

Worked with different embedded software development tools from Renesas Technologies and IBM, such as Hew, RTRT, CM and CS systems, DOORS, QAC

Prolific with **ODIS(Offboard-Diagnostic Information System)**, CAN and other protocols, car diagnosis code and methods

Cooperated with mostly all CoCs (BroadCast, Media, Connected Devices, HMI, System, etc), specialized in Diagnosis, ConnectionMaster, worked on some media subsystems (Bluetooth system, CD/CDDA), maintained old code and improved

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Analyzed new requirements for 2nd generation software that we need to provide to customers

TELCOs with the customer on different issues, and also been part of meetings with FOs (function owners), managers and other decision makers regarding different top issues, or simply by given updated information on different PRs and other ongoing analysis

Worked on implementing different diagnosis components, connection and audio master components, media playlists, LSM (last seen media) fix-ups, AudioMaster registry settings fixes  
Updated and emailed every week the RTRT code coverage of the tested system parts  
Wrote weekly concise reports on different issues that needed to be solved and/or updated

Verified the new code weekly QACs against Misra C/C++ Rules, analyzed crash dumps, used SiTEMPPO - Siemens Test Execution Managing Planning and rePorting Organizer

*Environment: Visual C++ 10.0, Renesas Tools (Hew - High Performance Embedded WorkShop), IBM Tools (Rational Test RealTIME, Rational Synergy v7, DOORS), SiTEMPPO*

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## **ZipONE Inc., Atlanta GA, USA**

*Engine and Algorithms, Compression and Encryption  
Software Developer*

In 2005, ZipONE Inc of Atlanta GA, acquired privately held ZipWORX LLC, a developer and provider of ZIP software compression and encryption services company. The majority of ZipWORX employees joined ZipONE Inc team in Atlanta GA

Worked on all ZipONE products: ZipONE Deluxe 3.1 and ZipONE Professional  
Here is ZDNet Description on ZipONE Professional

*“Manage all your ZIP files with full AES Strong Encryption support and Windows XP themes. Comprehensive ZIP utility comes along with Explorer integration for fast In-Place Zip, Wizard tool, Batch ZIP files processing, ZIP Favorites and full ZIP History. ZipONE Professional comes in three editions, from Lite, Deluxe to Full Edition. ZipONE Pro also provides a toolbar for encryption settings, interchangeable toolbars, skinned Self-Extracting ZIP files. The Professional Edition offers more tools like a Batch ZIP files processing support, the ability to open more ZIP files in different tabs within the same application, FTP Upload and Download of ZIP files, task panel for easy operations, product showcase description tab and help.”*

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*Environment: Visual C++ 8.0 w/advanced MFC, Xtreme Toolkit 2.0, Microsoft HTML Help, Windows platforms*

## **ZipWORX LLC., Dayton OH, USA**

**Jul 2005 - 2006**

*Engine and Algorithms, Compression and Encryption  
Team Lead / Developer*

- ZipWORX LLC, a developer and provider of ZIP compression and encryption services and utility software company
- Worked on all flagship products of ZipWORX LLC, including ZipWORX SecureSFX, ZipWORX SecureEXE, ZipWORX Outlook Companion and ZipWORX Explorer & Explorer Wizard
- Also implemented an online store using litecommerce (litecommerce.com) solution for creating an online software shopping website for ZipWORX LLC

*Environment: Visual C++ 8.0 w/MFC, Xtreme Toolkit 2.0, Visio, MsOffice, MacroMedia Dream WEAVER MX, CHM Help Creator, Windows platforms*

## **PKWARE Inc., Milwaukee, WI**

*Software Developer Engineer*

**2004-2005**

Active member, designer and implementer of the new PkZIP 7.0 project and PkZip SecureZIP line of products

- Wrote PkZIP 7.0 Wizard, a project designed and implemented in C++ using WTL that links to other existing COM components.
- Among different features it has a built in custom callback mechanism, support for other existing libraries and feature sets, while utilizing as much of the existing code base as possible

## **CONTRACT Work for LexisNexis Inc, Dayton, Ohio (ManPower Inc)**

**2004**

*Implemented custom data compression solutions using advanced compression algorithms to compress specific data from some of LexisNexis databases*

## **PKWARE of Ohio Inc., Miamisburg Ohio**

*Software Developer Engineer*

**June 2003 – July 2004**

Active member, designer and implementer of the new PkZIP 7.0 project and PkZip SecureZIP line of products

- Worked on the COM control object that interfaces the program's option dialogs, PkOptions. Flexible COM control interface written in C++ using also ATL and WTL, PkOptions represent a major part of the new PkZIP 7.0 project
- Among features: multi-bit standard AES encryption, other security elements and certificate-based signature detection, etc.

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*Worked on, modified and improved algorithms and programs initially written by Phil Katz, the inventor of ZIP format and algorithms (deflate, inflate, arc, unarc, etc);*

**ASI Inc., Dayton OH, USA**

**Jun 2002 – May 2000**

*Engine and Algorithms, Compression and Encryption/Software Engineer*

Implemented a compression and encryption library for the Windows product in C++ using MFC and Visual C++ 7. The library delivered AES, DES and BlowFish encryption plus built-in streaming compression and archiving

- Achieved high proficiency in GUI development using in particular CodeJock Visual C++ ToolKits Worked closely with the AIX/MVS/VMS teams to incorporate AES-128b/AES-192b/AES-256bit, DES and BlowFish encryption various libraries
- In charge of porting the library to UNIX. Worked with SoftMain's porting tool MainSoft

*Environment: Visual C++ 7.0 w/MFC, WTL, CodeJock.com Xtreme Toolkit 2.0, Visual Source Safe, Visio, MainSoft third party developer tools, Windows platforms*

**STRATUSBURG LLC, Miamisburg OH, USA**

**Sep 2001 – May 2002**

*Projects: ExeLock, StratusBurg.com*

*Role: Software Engineer*

Together with entrepreneur Steve Burg, former CEO of NeoWORX LLC (NeoWorx.com now McAfee.com) and former VicePresident of PKWARE Inc

- Modified ExeLock & ExeLock Express, the two StratusBurg E-Commerce utility tools designed to password protect, encrypt and create time-trial executables
- Built up the company web site at [www.stratusburg.com](http://www.stratusburg.com) and took care of different logistics related to the start-up
- Contract work for Reynolds & Reynolds Co (reyrey.com) on a file archiving solution on VMS

*Environment: Visual C++ 6.0, Macromedia DreamWeaver MX*

**REALNETWORKS INC, Seattle Washington**

**Dec 1999 – July 2001**

*Software Development Engineer*

- Replaced ICT's Universal Xpress data compression program within the RealNetwork's Installer with a fine tuned XZip variant
- Designed and implemented Game Packager Tool for RealArcade, an easy to use Wizard. It was designed to create customized games packages with metadata information
- Created a new installation system for RealArcade's games, minimizing the impact of bigger games installation (removal of temporary decompression space and speeding up installation script)

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- Shipped NetZip 7.5.1 with major improvements on archive operations and overall stability. Wrote a new TAR + Variants [gzip, lzw] decompression engine and designed NetZip Classic 8.0

**NETZIP INC., Atlanta, GA**  
*Software Development Engineer*

**July 1999 – 2000**

- Worked on XZip, a solid compression & archiving utility. Powerful options include: archive splitting in volumes, password protection, archive lock/unlock capability, and a damage protection and data recovery technique
- Designed and wrote NetZip Self-Extractor Wizard
- Implemented ZipInPlace, a COM interface application that worked with DynaZip compression engine

## E D U C A T I O N

**PHD Student, ETTI** ([UPB ETTI Faculty](#))

**Masters of Science, Applied Science Faculty** ([UPB FSA Faculty](#))

- Theory of Information Coding and Storing
- Polytechnics University of Bucharest, Bucharest, 2014-2016

**Bachelor of Science, Computers Faculty** (Computer Science, Software division)

- Polytechnics University of Bucharest, Bucharest, 2001

**Mathematics-Physics Theoretical High School, Valcea, Romania, 1995**

- Computer Science class



## C E R T I F I C A T E S

- **Essential Negotiation Skills** - for Engineers - March 2016
- **Problem Solving and Decision Making** - October 2014
- **Unix/Linux for embedded/telecom - Systems programming in POSIX environments** - Oct 2014
- **Software Architectural Methodology** - Designing and Analyzing Software Architectures- November 2014
- **Test Automation Scripting - Python** - Feb 2013
- **Enterprise Application - Design Patterns** - Nov 2014
- **Project Estimation: Size and Labor Efforts** - feb 2013
- **Smart Certify Direct** - Certificate of Completion of MSVC++ Certif. Training, February 2003
- **ExpertRating** - Certificate of Completion "Programming with C++", March 2004

## P A T E N T S

### [Systems and methods for creating self-extracting files](#)

**Patent number:** [8402005](#)

**Abstract:** Systems and methods are disclosed for creating a self-extracting file from any given input file type with minimum user interaction...

**Filed:** March 27, 2001 / **Issued:** March 19, 2013 / **Assignee:** Intel Corporation

**Inventor:** Sabin Belu

### [Systems and methods for multiple-file data compression](#)

**Patent number:** [6522268](#)

**Abstract:** The systems and methods relate to the compression of multiple files into a single file called an archive...

**Filed:** January 5, 2001 / **Issued:** February 18, 2003 / **Assignee:** RealNetworks, Inc.

**Inventor:** Sabin Belu

More on Patents: <https://patents.justia.com/inventor/sabin-belu>

**KeyWords:** Encryption, Entropy, Coding, AES, RSA, Cyphers, Algorithms, Programming, Data Compression, Range Coding, ANS