Personal details

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Education

2015.02 -2016.07 **Wrocław University of Technology**

Full-time, master's degree studies in Computer Science at Faculty of Fundamental Problems of Technology with the specialization of Algorithmics.

Diploma thesis: Selected robust discrete optimization problems with recourse.

The final grade of studies: 5,0 (A)

2011.10 -2015.01 **Wrocław University of Technology**

full-time, enginieer's degree studies in Computer Science at Faculty of Fundamental Problems of Technology.

Diploma thesis: Shortest-path searching algorithms in real road networks.

The final grade of studies: 5,5 (A), laureate of the best graduate title at Faculty of Fundamental Problems of Technology in academic year 2014/2015.

Foreign languages (native language – Polish)

English: German:

Speaking and writing: upper-intermediate (B2+) ,   Speaking and writing: beginner (A1)

Commercial expirience

2018.08 – **Capgemini Polska Sp. z.o.o. (Wrocław – CSD FS Banking)**

• Development of new and existing software for the financial sector (C #, .NET, TSQL),

• maintaining and transformation of existing solutions to newer technologies,

• responsibility for a full software development cycle (collection of requirements, design, implementation, deploy, maintenance), contact with client architects,

• creating and maintain of unit tests for both new and existing code.

2018.02 – 2018.05 **SENTE Systemy Informatyczne Sp. z.o.o. (Wrocław – R&D section)**

• Maintaining and development the internal framework Neos, creating new functionalities for main ERP desktop and web application, based on that framework (C#, Firebird /PSQL, CSS),

• developing satellite, Neos-based products/plug-in's (C#),

• providing technical support to other teams in the field of companie's internal technology,

• conducting internal training (Git, ERP application know-how, Neos platform).

2016.04 – 2018.01	**SENTE Systemy Informatyczne Sp. z.o.o. (Wrocław – Service Team)**

• Creating functionalities in the ERP class system in the areas of Finances and Accountancy, Personnel, handling key clients (phone contact),

• ensuring ERP application maintenance and error correction (C ++, C #),

• optimization of database structures (Firebird/PSQL),

• conducting internal training (Git, ERP application know-how).

2014.07 – 2015.01	**COMARCH S.A. (Wrocław – interupted for the Master's degree studies)**

• Implementation and testing of computer software,

• creating functionalities in a CRM class system for a client in Java J2EE technology with the Spring and Hibernate components, based on the Oracle relational database,

• conducting regression tests.

2013.07 – 2013.09	**COMARCH S.A. (paid internship - Wrocław - interrupted to complete Enginieer's studies)**

• Implementation and testing of computer software,

• modification of the tariff-change functionality in the CRM class, Java J2EE-based system using Spring and Hibernate components with the Oracle relational database.

Commercial projects (SENTE Systemy Informatyczne Sp. z.o.o.)

• Implementing GDPR plug-in project for the main ERP application that ensuransed it's compliance with EU regulations relating to the protection of personal data (C#, Firebird /PSQL),

• Creation of an interactive, automated training environment in the field of version control systems (Git). System assumptions: self-developing work with real repositories, provided automatically by the system, defining scenarios to be performed, the possibility of automated verification, system allows automatic interference in the state of any repository, modify it to sute the needs of the next scenarios (artificial repository user), ease of adding scenarios (HTML5, CSS3, JS: jQuery, jQuery UI, AJAX, DataTables, Notify, TipTop, Node.js: Express, Scribe-js, JSON, Gitolite, Perl, Bash, Firebird/PSQL).

• Implementation of Standard Audit File for Tax (pl. JPK) service interfaces - a library supporting the generation of JPK documents based on downloaded information from customer databases, ensuring communication with the Ministry of Finance's electronic document exchange system for JPK (REST, Azure Storage) along with proper data encryption (C#: RestSharp, BouncyCastle, NLog, Firebird/PSQL).

• Implementation of the interface for ERP application for running external libraries. Application assumptions: a graphical interface that downloads and processes information from an ERP application depending on the loaded library (plug-in), displaying the status of data processing progress by a plug-in through a shared interface (C#: WPF, Linq, Firebird/PSQL).

• Implementation of a plug-in library to support cryptographic processes for the needs of the Ministry of Finance's electronic file exchange system. System assumptions: offering the possibility of submitting an electronic signature (XAdES-BES) on any XML document (C #: WPF, MVVM, Linq, BouncyCastle, Nlog).

Technical skills

Preferred programming languages: C#, Java SE, C++.

• C# (currently leading, main language at R&D section of SENTE Systemy Informatyczne Sp. z.o.o.),

• C/C++ (projects accompanying diploma work, C ++ necessary for the development of the source code of ERP application in SENTE Systemy Informatyczne Sp. Z o.o.o. - technological debt, rarely used),

• Java SE (a significant part of academic projects, starting cooperation with COMARCH S.A – Java EE).

Web technologies:

• JS (Node.js, REST, jQuery oraz jQuery UI, AJAX, TS, laureate of Synergy Codes Code Challenge 2015),

• HTML5/CSS3 (selectors, CSS-Grid, basic styling and transformations).

Knowledge of databases, project management environments, programming environments:

• knowledge of relational databases: Firebird, Oracle, MySQL, MS Server,

• work with project management enviroments like JIRA (Comarch S.A., SENTE) , version control systems: SVN (Comarch S.A.), Git (SENTE Systemy Informatyczne Sp. z.o.o.),

• work in given programming environments: Visual Studio Express, Eclipse

Knowledge of advanced data structures:

• implementation and graphical simulation of structures: RBT, enhanced RBT, BST, SkipList, implementation of positional statistics based search algorithms - Median of medians, RandomSelect (Java, C ++).

Knowledge of Java EE elements:

• work with EJB (IoC) technologies, JPA (Hibernate), JSP, Spring, Apache POI-HSSF (Comarch S.A.)

Other qualifications:

• knowledge of SCRUM methodology (Comarch S.A., SENTE), GNU Bash environment, basic knowledge of Jenkins processes, Selenium, Docker, Nightwatch.js, practical knowledge of LP / MIP / IP programming and optimization packages (GNU Octave, IBM ILOG).

Academic projects:

• Master's degree project. rojekt magisterski. Implementation of robust optimization algorithms with simultaneous solution of problems: minimax, adversary, resistant minimum spanning tree with the possibility of improvement (C++11, log4cxx, Graphviz, IBM ILOG CPLEX, RapidJson, Boost).

• Engineering project. Implementation of shortest-path search algorithms used in road traffic: variants of the generic Dijkstra algorithm (with range modification (**DKA**), using a multi-level structure (**DKD**), with overflow support (**DKM**)), based on known structures (K-trees (**DKH**), R-heaps (**DKR**), Fibonacci's mound (**DKF**)), algorithms: Dial (**DKL**), RadixHeap (**DKX**), Pape (**PAP**), Pallottino (**TQQ**), topological algorithms (**GR1**, **GR2**) and a threshold algorithm (**THR**) (C ISO 9899: 1999).

• Implementation of an imperative language compiler for a given virtual machine specification (C, Flex, Bison).

• Web application for IT project management integrated with the SVN version control system. Team project based on AJAX technology and MS SQL database (jQuery/XHTML/T-SQL/MDX).

• LoChat – social application based on local reach/location and preferences/expectations. Team project that delivers a simple way to obtaining information about the region, local activities ad so on (Android, PostgreSQL, Node.js, Socket.IO).
• Android MultiPlay – an application for mobile devices with Android, simulating most of well-known physical Plug & Play controllers (PC/PS). Team project using wireless WiFi / BT communication, SQLite database (Java SE),

• implementation of sorting algorithms: Insertion-, Bubble-, IterativeMerge-, RecursiveMerge-, Quick-, Heap-, Counting-, Radix – sort. Analysis of the complexity of individual algorithms or hybrid versions of them (Java SE).

• ScholaPPTCreator – project generating presentations in .ppt format based on given .txt files (Java, Apache POI-HSSF, CLI, EJB, Google MJL).

Additional information

Programmer that hates to make thinkgs that barely works ("MWE is good enough" approach), interested in ways of algorithms optimalisation. I like books, films (especialy high-fantasy), paper/digital RPG's, fantasy convents. I also enjoy singing (I have a small participation in choir), performing, spending time with board games or strategy games.