Piotr Kosek

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Skills and knowledge

Legend:
90% - idiomatic knowledge and writing skills
70% - comprehensive knowledge and ability to write correct programs
50% - ability to write correct programs
30% - able to read and reason about most constructs
10% - able to understand the basic idea behind a language/technology and recognize some constructs

Programming Languages	Projects	Honor & Awards
C# (90%)	• **WorkplaceProtect**, application for authentication and security management of PC, including handling of external biometric sensors (Fingerprints, PalmVeins, FaceRecognition, SmartCard) • **WorkplaceManager**, central hub for managing and secure PCs in large corporation environment • **Revolutionary Wave**, game written during Global Game Jam competition (project had to be written within 48h) in an on-site formed team of 5 developers and artists (any of them had not previously worked together) • **Hawking**, game written during Speed-Game-Session (24h) in Unity featuring real-time multiplayer • **Platform game**, written during Speed-Game-Session (24h) as introduction to Unity (in team of 2). • **Simple RTS**, game written during Speed-Game-Session (24h) in XNA, also featuring real-time multiplayer (manual UDP packet manager) • ShoperDumper, application for e-shop for collecting and printing order labels for shipment, collect data from database and present reports of sales • **Fool's Carrot**, a game written during Global Game Jam competition (48h) in C#/XNA, scoring 2nd place overall.	• **Microsoft Certified Professional** (2017) • **Microsoft Specialist in C#** (2017) • **The best in Lodz in .NET** (Lodzki Test IT 2014) • 2nd Place in Global Game Jam (2010)

C++
 	
(90%)
	• **Magician's Apprentice**, in-house 2,5D OpenGL game, successfully greenlit on Steam
	• **Pixie Engine**, game framework powering up **Kosek.com** games, open sourced since 4th revision
	• **Drakan 10th Anniversary**, overhaul renderer for 1998 game Drakan: Order of the Flame. DirectX 6.1/9.0c
	• **Pixel Effect** - freeware Mass Effect de-make/parody for mobiles and desktop (never released due to copyright reasons)
	• **Dark Wars**, 7-day 3D shut-em-up game in C4 engine
	• Hidden Object Engine (HOE): game-engine for developing series of adventure games for PC/IPAD/Nintendo DS. Released titles:
	   ○ **Linda Hyde: Vampire Mansion**
	   ○ **Linda Hyde: Angel Code**
	   ○ **1001 Touch Games**
	• **Lost Dream**: freeware 30-day hex-based strategy game (2D + SDL)
		• **The best in Lodz in C++** (Lodzki Test IT 2016)
		• **The best in Lodz in C++** (Lodzki Test IT 2015)
		• **Recognition for high results in Potyczki Algorytmiczne contest** (2013)
		• 4th place as student and 9th overall in Poland-wide contest organized by Technical University of Gdansk, involving writing artificial intelligence for given computer game (2006)

ActionScript 3.0 70%	• **Book of Infinite Tales**, as3-based online game (non-public beta available) • Art thief: search & destroy (unavailable online due to Google policy changed), now-defunct tool for searching stolen images from online galleries using Google Image Search API calls	
HTML5 + CSS3 + Javascript 70%	• Book of Infinite Tales port for modern mobile platforms (in progress). See above • **Retrospective**, narrative game written during GGULIVRR in 2 weeks in international team of 4 developers and 2 non-developers. • **Riddles of the Sphinx** , cordova-based mobile app featuring random generator for riddles (producing about millions different riddles) • Photoshop plug-in for artists during Hidden Object Engine project. See above • **LogicGen**, online generator used as warm-up for the mentioned above game	• Microsoft exam 480 passed • Very high marks on Retrospective during sum-up of GGULIVRR project

PHP + MySQL		
60%	• Revision (in progress) of Smocze Strony, one of the oldest fantasy-related portal in Polish Internet (ranging back to 1997). • Online-quest-debugger for Book of Infinite Tales, allowing simulating various scenarios (including different player character setup, different outcome of random encounters, etc.) • Golden Dragon, now-defunct browser based MMORPG, with 5,000+ players. Developed in a team of 4 • Official webpage of Przeglad Wlokienniczy journal webpage, including build-from-scratch administrator panel • Various webpages for medical journals and science conferences, done on contract for Oficyna Wydawnicza MA	

Windows Batch		
60%	• Various build scripts, including Pixie Engine scripts	

Paradigms & Domains	Projects	Honor & Awards
Imperative/Procedural 90%	• Drakan 10th Anniversary (C++, see above) • Pixel Effect (C++, see above) • Retrospective (HTML5, see above) • Riddles of the Sphinx (HTML5, see above) • LogicGen (HTML5, see above) • Debugger for Book of Infinite Tales (PHP, see above) • Golden Dragon (PHP, see above)	
Object-oriented 90%	• WorkplaceProtect (C#/WPF, see above) • WorkplaceManager (C#/WPF, see above) • Simple RTS (C#/XNA, see above) • ShoperDumper (C#/WinForms, see above) • Fool's Carrot (C#/XNA, see above) • Magician's Apprentice (C++, see above) • Pixie Engine (C++, advanced OOP design, see above) • Dark Wars (C++, advanced OOP design, see above) • Lost Dream (C++, see above)	• The best in Lodz in OOP (Lodzki Test IT 2014)
Event Driven 70%	• WorkplaceProtect (C#/WPF, see above) • WorkplaceManager (C#/WPF, see above) • ShoperDumper (C#/WinForms, see above) • Book of Infinite Tales (ActionScript 3.0, see above)	
Data Driven 60%	• Revolutionary Wave (C#/Unity, see above) • Hawking (C#/Unity, see above) • Platform game (C#/Unity, see above)	
Security 60%	• WorkplaceProtect (Encryption of user data and communication protocols, see above) • WorkplaceManager (Secure flow of information, see above)	
Networking 50%	• Hawking (RealTime Unity, see above) • Simple RTS (C#/low-level packets, see above) • ShoperDumper (High level REST API, see above) • P2 (tech demo of unreleased grand strategy game, turn-based multiplayer via raw TCP sockets) • DeviantArtBatchDownloader (simple CLI tool to batch-download arts from DeviantArt. It supports art lookup via REST api)	• Microsoft Technology Associate: Networking Fundamentals
Database 50%	• WorkplaceManager (MS SQL database back-end, see above) • Book of Infinite Tales (central MySQL database for users' characters) • Smocze Strony (MySQL database back-end, see above) • Golden Dragon (MySQL database handling hundreds of concurrent users) • Przeglad Wlokienniczy (simple MySQL database for webpage) • Various webpages' databases MySQL for Oficyna Wydawnicza Ma	

Resource Constrained 50%	• Pixel Effect (Amiga-emulator port as April's Fool joke, see above) • Linda Hyde: Vampire Mansion (run on Nintendo DS on 4 mb of RAM, see above) • Linda Hyde: Angel Code (run on Nintendo DS on 4 mb of RAM, see above) • 1001 Touch Games (run on Nintendo DS on 4 mb of RAM, see above)	

Frameworks	Projects	Honor & Awards
Windows Forms 90%	• ShoperDumper (WinForm C#, see above) • PixelEffect editor (Modding tool for Pixel Effect game) • Various tools for Hidden Object Engine (including tools for translators, scene validator, scene memory usage estimer)	
WPF 70%	• WorkplaceProtect (WPF/XAML, see above) • WorkplaceManager (WPF/XAML, see above)	
WinAPI 60%	• Pixie Engine (Low level platform support, see above) • Drakan 10th Anniversary (hooking WinAPI dll calls)	
Unity Engine 60%	• Revolutionary Wave (48h contest game, see above) • Hawking (24h Speed-Game-Session game, see above) • Platform game (24h Speed-Game-Session game, see above)	
OpenGL / DirectX 9.0c / SDL 2.0 50%	• Magician's Apprentice (2.5D OpenGL renderer based on SDL 2, see above) • Pixie Engine (Both OpenGL and DirectX renderer are available in revision 3, see above) • Drakan 10th Anniversary (Translating DirectX 6.1 DLL calls into DirectX 9.0c calls, injecting shaders)	
Flash 50%	• Book of Infinite Tales (Flash-based front-end for server, see above)	

Tools	Projects	Honor & Awards
Visual Studio 90%	• Most of above, including all C++/C# • Used with Unity as external coding editor • Wiring up custom tools • Wiring up custom build system (Pixie Engine, Magician's Apprentice, Drakan 10th Anniversary)	
ANT 70%	• Pixie Engine (both wired to Visual Studio and indepedent) • Magician's Apprentice (used to build all versions on all platforms)	
Git / TFS / BitBucket 50%	• TFS/Git for WorkplaceProtect / WorkplaceManager • Git used in all personal projects since 2016 • BitBucket front-end for Git used since 2017	

Professional Experience

2016-present – **R&D Developer at Fujitsu Technology Solutions Sp. z o. o.**
Programming applications related to cyber security, user authorization and authentication (C#/WPF/XAML/Active Directory), implementing new features, conducting internal programming training, remote cooperation (team composed of employees in Poland, Germany and Finland), strong emphasis on self-reliance, using modern developer tools.

2013-2016 – **Sole proprietorship (official Business started at July, 2015) -** Developing games for Android (C++/PhoneGap), browser (ActionScript 3.0/HTML 5/PHP) and PCs (own OpenGL based framework written in C++), creating 3D animations on contract, creating CG graphics for TV movie "Zagłada Ziemiaństwa Polskiego" (3ds max), creating Windows Forms application for e-commerce (C#), conducting gamedev workshop at University as member of student association (2014-2016)

2010-2011 – **Teyon/Destan Entertainment** - Developing gameplay (C++), tools (C#/C++/Javascript), 3 shipped titles (PC/iPad/DS/DSiware/3DS platforms)

2007-2010 – Focused on learning (finalizing high school, attending classes at university)

2006-2007 – **Contract work for publisher „MA"** - Creating and administrating web pages of medical journals and conferences (LAMP platform)

Education

Presently I am attending bachelor's degree IT course at University of Lodz (7th semester out of 7), currently with health-related break (due to illness in October/November, 2016), scoring average mark 5.0 out of 5.0 for all classes of last year and receiving scholarship for high successes

2005-2008 - 12th High School in Lodz, mathematic/computer science class

Key Successes

2017 - Speaker at .NET meetup (introduction to using .NET for games)

2017 - Third place among all Lodz's IT students in Lodz's IT Test contest achieved again. Awarded the best C++ programmer among students in Lodz in 2016

2016 - Third place among all Lodz's IT students in Lodz's IT Test contest. Awarded the best C++ programmer among students in Lodz in 2015

2015 - Participating and very high review grades (no places were given during event) during interdisciplinary international team project GGULIVR, during which students from different countries worked together on-site in Lodz on series of games related to EC-1 (Lodz's Thermal Power Plant being converted to high-tech museum). Leading tech team of four (Vietnamese, Irishman, Dutchman and Belgian), creating game in web environment, presentation and strict by-progress reporting to mentors.

2015 - The most "kudo-cards" received in Lodz edition of Java Code Retreat 2015 (awarded by participants to people they found out working with during event most pleasing)

2015 - 20th place overall in Lodz's IT test. Awarded the best in .NET among students in Lodz in 2014. Also awarded the best in OOP among students in Lodz in 2014

2014 - The best result in Poland in contest ran by Japanese company Rococo, offering completing master thesis in Japan. Resigning from moving to Japan due to personal reason.

2013 - Recognition for high result in rank B of Algorithmic Duels of 2013

2012 - Developed in team of two fan add-on for Drakan: Order of the Flame catching calls for DX 6.1 and translating them to DX 9.0c with shader injection, allowing unparallel special effects unobtainable for games made in 90s, without access to original source code

2010 - Second place (as team) in KrakJam, polish edition of Global Game Jam event, involving writing computer games on given subject in strict 48h timespan (*Fool's Carrot* game, C#/XNA)

2009 - Conducting game-prototyping workshops for high school students during open days of University of Lodz

2006 - 4th place as high school student and 9th overall in Poland-wide contest organized by Technical University of Gdansk, involving writing artificial intelligence for given computer game

2006-2008 – leading the team of four as core developer in indie game "Golden Dragon", now-defunct browser based MMORPG built in PHP solely on homebrew technology (35,000 lines of code, 5,000 registered players)

Additional Courses

2016 - Running a SCRUM project

2009 - Course relating terminology, forms and good practices of social works

2007 - Ten month-length movie making course, including scriptwriting, film montage, basics of director work

2004 - Flash 5 course, first experience with code writing

Languages

English – B2/C1 level

Sport / Hobby

Modern archery

Fantasy

Creating art (http://stray-soul.deviantart.com/)