

Profile

IT professional with a history of: providing cost-effective and innovative solutions; meeting client's diverse requirements and organizational goals; and delivering on time and on budget. Broad experience working as a consultant for worldwide clients that share the need for expertise:

- Conducting interviews to translate customer needs into design specifications, in English or French
- Designing and implementing product(s) in a timely and cost-effective manner
- Providing ongoing technical support
- Documenting new and existing product(s), both for engineers and users
- Managing multiple project assignments
- Working effectively alone or in large, established teams
- Experience developing for Win32, OS X, Linux, Xbox, Xbox360, and Playstation 2 platforms simultaneously

Project Highlights

Owner, Marginally Clever Software

As a Linux systems administrator – setup & maintenance of a web platform; rollout of new technologies, updates, and patches; building and maintaining dynamic web front- and back- ends with PHP, AJAX, ASP, and MySQL; and integrating networked solutions to automate an online purchase, software update, and email system.

As a Software engineer – budgeting, planning, designing, and creating interactive entertainment software and web services; creating visual and audio content for said software and services; researching and acquiring cost-effective solutions; performing innovative R&D; using version control, bug-tracking software, and CRM software; and designing & building robots.

As a machinist – designing, sourcing, building, assembling, and operating a CNC machine, a walking crab robot, a pick-and-place delta robot, and a vertically hanging draw robot; and writing custom control software for most of these machines.

As a public speaker – giving clear oral presentations about the technical and philosophical aspects of robotics.

Engineer, Virtually Canadian

Learning the finer points of SEO optimization.

Director of Technology, Reverb Marketing, Inc.

As a director – orchestrating the creation and maintenance of new revenue streams; implementing payroll and invoicing systems; optimizing processes & procedures and standardizing workflow; and implementing time tracking methodologies.

As a project manager – interfacing with clients to manage expectations; network & generate new leads; evaluate employee strengths to maximize productivity and employee well-being

Programmer, Test Engineer Electronic Arts (Black Box Studio)

Assisted in the development of the Playstation 2 game "Need For Speed: Most Wanted". This involved finding and verifying the existence of software bugs; refactoring outdated technologies to

better suit the company objectives by streamlining content creation pipelines; meet the demands of new technology by analyzing its capabilities, drivers, and tools to maximize software performance; attending training seminars in Vancouver to stay on top of emerging policies and technologies; and quickly assimilating new data and new organizational culture to integrate into existing teams.

Software engineer, Ratbag Games Pty LLC, Australia

Developing a wide variety of game-related material – On the 'tools' team, identifying and eliminating bottlenecks in the content creation process by creating software to automate complex tasks; on the 'game' team, building complex simulations of real-world scenarios that used no more than the allocated CPU or RAM budget; and at all times documenting, testing, and submitting design to peer review to ensure sane, effective, and easily-maintained software.

3D software engineer, Clockwise, Israel

Developing a 3D version of the Windows desktop. Brought in late on a project when a vital programmer had to leave to do his mandatory army service; improved upon original design and later leading a complete redesign of the code when the old solution was no longer effective.

Network programmer, Symbionix, Israel

Developing virtual reality simulators to train surgeons in the use of an endoscopy device. By enabling the software to communicate over the internet, teachers could interact with students and monitor performance without having to be physically present, increasing the student/teacher ratio without degrading the quality of the training.

Network programmer, 3DION, Israel

Developing a real time 3D online virtual community. Specifically, developing innovative algorithms for reducing or eliminating the visible effects of 'lag' (the delay between the sending of a message and the receiving of an acknowledgement).

Co-author, "Advanced Programming in DirectX 7.0"

DirectX is an API that enables engineers to make complex 3D graphics on modern computer hardware. Many engineers who are just learning graphics need a primer. Those who are familiar can use the samples and tutorials in the book to increase their understanding of the finer points of the API.

Professional History

- Facilities Coordinator, Mini Maker Faire Fundraiser, 2012
- Judge, IARRC robotics competition 2011
- Manager and Lead software engineer, Marginally Clever Software, 2004-present
- Director of Technology, Reverb Marketing, 2007-2008.
- Programmer, Test Engineer, Electronic Arts (Black Box Studio) 2005
- Teacher, Interface Design and Introduction to Programming 2004 – 2005
- On Line Expert, Kasamba 2004 – 2007
- Software engineer, Ratbag Games Pty LLC 2002 - 2004
- 3D software engineer, Clockwise 2002
- Network programmer, Symbionix 2002
- Network programmer, 3Dion 2001

Key Skills Summary

Programming languages: C/C++, Java, Processing, COBOL, PHP, MySQL, Javascript, AJAX, DHTML, XML, CSS, and more.

APIs & Libraries: OpenGL, DirectX, FMOD, wxWidgets, Winsock, and more.

Platform-specific development: Windows, Linux, Apple OS X, Apple iPhone, PS2, XBox, and Xbox360.

Tools: MSVC, GCC, GDB, Borland, SourceSafe, Perforce, vi, Bloodshed C++, Photoshop, 3D Studio Max, SVN, git, Eclipse, and more.

Theory: designing, documenting, refactoring, unit testing, extreme programming, cross-platform development, scheduling, motivating, and more.

References and additional project descriptions available upon request.