Charles (Chuck) Zalinski

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Professional Profile

* 20 years’ experience in software and hardware engineering and development
* 6 ½ years’ experience in project management, product specification and customer liaison
* Master’s degree from the University of Michigan, Ann Arbor
  + Electrical Engineering Systems: specializing in data compression (especially Vector Quantization), signal & image processing, information theory and probability

University Education

* MSEE: Systems, University of Michigan, Ann Arbor (Rackham Scholar)
* BSEE, Wayne State University, Detroit (Merit Scholar)
* University of Washington: Some graduate-level coursework in computer science (algorithms, software engineering)

Technical Skills

* *Expert software developer:* C#, C/C++, some assembly, Object-Oriented analysis and design, and UML modeling.
* *Multi-threading & Concurrent Programming*
* *Device Drivers & Boot Loaders:* Windows CE (DVD playback, ATA-IDE, GPIO, I2C)
* *OS Platforms:* Windows, Windows CE & Mobile, Solaris, MSR Singularity
* *Web* *Development*: C# MVC, PHP, Drupal 7
* *Web Skills (intermediate):* CSS & HTML, SQL Database
* *Image & Video Compression:* JPEG, JBIG & CCITT image coding standard knowledge (Applied R&D). MPEG-2 & DVD video standards (device driver implementation). Huffman/Entropy coding, Arithmetic coding, Vector Quantization, image scaling algorithms.
* *Electrical Hardware:* understand electrical schematics; use logic analyzers, oscilloscopes, spectrum analyzers; design and layout of digital hardware.
* *Specification Writing:* Functional and technical requirements including formal Use Case modeling.
* *Graduate-level applied mathematics education:* probability, statistics, linear systems, signal & image processing, information theory, data compression

Project Management Skills

* 3 years Agile project management (Scum with 2 years as Scrum-master)
* 3 ½ years in the “Program Manager” role at Microsoft with these duties:
  + Product vision and specification
  + Customer advocate and liaison
  + Project manager and team coordinator (traditional & agile “Scrum” methodologies)
  + Resource prioritization and negotiation
  + Communications to management and external customers
  + Successfully delivered several Microsoft product releases for Windows Mobile Platform Builder tools (CE 5.0, Mobile 5.0, CE 6.0, and Mobile 6.0 & 6.1).
* 3 years as technical manager for team of 6 engineers developing GPS turn-by-turn navigation system (InfoMove).

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| Employment History |  |
| Microsoft (Volt Information Sciences) – Redmond, WA | **March 2010 - June 2012**  (with 100 day breaks) |

Software Design Engineer (Contract) – Microsoft Research

* Desktop tools for visualizing data-center networks (WPF and MSAGL graphing library)
* Defined interfaces for network management and visualization in a data-center environment
* Development of kernel, boot loader, test and application software on Microsoft’s research OS: Singularity
* OS message passing algorithm research on 48-core prototype hardware from Intel
* Designed and implemented distributed operating system features to Singularity OS

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| Microsoft – Redmond, WA | **January 2006 - September 2008** |

Technical Lead Program Manager – Windows Mobile & IIS

* *Mobile BSP & Drivers Team*: Managed mobile phone hardware partner relations and project management for Microsoft’s Mobile phone Board Support Package and Drivers team. C# Coding for desktop development tools and prototypes.
* *Web Hosting (IIS):* Functional specifications and project management for features designed to support IIS shared web hosting scenarios.
* *Platform Builder Developer Tools*: Led migration of the Platform Builder developer tools into the Visual Studio 2005 framework.
* *Platform Builder Developer Tools:* Managed feature improvements and product delivery of the development tools for Windows Mobile (CE 5.0, CE 6.0, Mobile 5.0, Mobile 6.0, Mobile 6.1)

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| Microsoft – Redmond, WA | **November 2002 - December 2005** |

Senior Software Design Engineer – Windows Mobile

* Designed, implemented and maintained Platform Builder IDE features for Windows CE 4.1 and 4.2 developer tools releases.

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| InfoMove – Kirkland, WA | **September 1999 - October 2002** |

Group Manager – Mobile Client Applications

* Primary software architect and designer for InfoMove Mobile Client Application suite and navigation system (Navigation on a Pocket PC)
* Manager for team of 15 software engineers

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| VDO Car COmmunication – Wetzlar, Germany | **September 1998 - September 1999** |

Software Consultant – BMW Navigation System

* Year-long contract to ramp up Windows CE development team and engineering process for the BMW 7 Series navigation system
* Technical advisor and liaison between VDO and Microsoft, Hitachi, and other vendors

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| Electroglas – Santa Clara, CA | **January 1998 – September 1998** |

Software Consultant

* Designed and developed motion controller software components for control of semiconductor manufacturing equipment

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| Microsoft – Redmond, WA | **October 1995 – January 1998** |

Software Design Engineer – Windows CE

* Multi-media device-driver development (DVD. MPEG-1, MPEG-2) players on Windows CE.

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| Independent Software Consultant | **September 1992 – October 1995** |

Various Short-term Contracts

* *The Northern Trust Bank – Chicago, IL*
  + FTP utilities for electronic document data transfers.
* AT&T Bell Labs – Naperville, IL
  + Data transfer module for video teleconferencing application.
* Wang – Dayton, OH
  + Enabled TCP-IP terminals to connect to legacy Unix database supporting Wright Patterson AFB medical logistics
  + This enabled data entry anywhere on the base and saved $3 Million annually.
* Bell+Howell UMI - Ann Arbor, MI
  + Designed and implemented image processing workflow system for capturing and processing periodical material and conversion to text

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| Unisys – Plymouth, MI | **June 1989 – September 1992** |

Senior System Engineer

* Applied Research & Development for high-speed image processing and compression of bank documents (checks, deposit slips, etc.)
  + Unisys’ representative on JPEG & JBIG standards body
  + Patent development relative to JPEG compression for documents
* Unix device-driver development for image capture boards
* Windows 3.1 application for bank-teller check scanning workstation

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| KMS Fusion – Ann Arbor, MI | **Summer 1988** |

Summer Intern

* Designed bench-top hardware for measuring lens coating reflectivity

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| ERIM – Ann Arbor, MI | **June 1985 – December 1987** |

Electrical Engineering Co-Op

* Testing and development of imaging radar hardware (digital, analog, and microwave)

**Patents**

* *5,339,368* & *5,751,846* – Document Image Compression System and Method
  + System and algorithms for tuning JPEG compression to achieve maximum document legibility within bandwidth constraints
* *7,426,730* – Method and system for generalized and adaptive transaction processing between uniform information services and applications
  + Protocol similar to SOAP for communication to web services