

Objective

Build high value software in a smart, passionate, caring team, hopefully earning good money.

Skills

Proficiency sample in parens where possible.

Programming Languages

- C# (co- and contra- variance, oldie-but-goodie <https://vimeo.com/44287613>)
- F# (type providers)
- Python 2.7
- SQL (T- and PL/ dialects)
- JavaScript (know good and bad parts, prefer Ramda to underscore)
- TypeScript (+DefinitelyTyped, I generally prefer static to dynamic typing)
- PowerShell (`| % ? @() @{ } [] , ,@())`)
- HTML/CSS/Less
- Scala (took online classes [Functional Programming Principles in Scala](#) and [Principles of Reactive Programming](#) with Martin Odersky)
- Haskell (took [Introduction to Functional Programming](#) with Erik Meijer)

Used, but do not want to use any more

- C++ (used to know C++07)
- XML+XSLT (co-wrote [Boost Regression Testing framework](#))
- ColdFusion (cfscript, underscore.cfc - had to do what needed to be done)

Concepts

- OOD/OOP
- SOLID
- ORM
- Fast (Unit) and slow (integration) testing
- Tactical DDD (no strategic DDD and CQRS)
- FP (`Ma -> (a->Mb) -> Mb`)

Frameworks and Technologies

- **.NET**: Castle Windsor, NHibernate, Entity Framework, ADO.NET, ASP.NET MVC, ASP.NET WebApi, WCF, LINQ, TPL, NUnit, Moq, PDFBox
- **JavaScript**: jQuery, Bootstrap, underscore.js, Knockout.js, Angular, AngularStrap, JSON/JSONP, Jasmine.
- **Databases**: SQL Server 2005/2008/2012, Oracle 11g, T-SQL, PL/SQL, SQL Server Reporting Services.
- **VCS**: Mercurial, Git, Perforce (know the difference between Hg and Git branches).
- **SDLC tools**: Jira, TeamCity, Jenkins (set up build configs, chains, created sophisticated multiple deliverable dependent builds).

Employment

2012 - present, Senior Application Developer, University of Iowa, Iowa City, IA

Worked on small to medium size solutions for different University of Iowa departments, including batch processes for variable printing, managing reviews of driver licenses for University of Iowa drivers, mini-insurance system for managing claims for University of Iowa auto and real estate incidents, University wide travel and procurement expense management system (rewrite from ColdFusion to .NET).

Worked on building a professional software development team, setting up processes, establishing shared vision, creating and maintaining standard operating procedures (SOP), supervised other developers.

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| Design and Planning | Talked to customers, understood their problems, proposed and discussed solutions. Wrote specs, created UI wireframes and project estimates. Generally, made things go forward. |
| Front-End Implementation | Wrote front-ends in Angular, Knockout, jQuery, Telerik web controls using Bootstrap, AngularStrap (the mess of technologies is the result of having to support many systems including very old ones) |
| Back-End Implementation | DDD-ish backends (domain model, repos, services, aggregate roots, domain events) written in C#, LINQ for SQL, SQL, EF going against SQL Server and Oracle. All components wired together using IoC container (Windsor). From no coverage to full coverage by fast (unit) and slow (integration) tests. |

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| Automation | Wrote installation (Desired State Configuration), deployment (we have our own Octopus-like deployment service) scripts, created a configuration management DSL that was used to create queryable infrastructure model. Automated existing processes, created utilities for Active Directory, Confluence, TeamCity, Sql Server and Oracle. |
| Team | Implemented shared between projects library of components to codify best practices (for front-end as well as for back-end). Made efforts to introduce policies regarding code sharing and continuous integration/deployment. Persisted in establishing team protocols (e.g. "Ask for help", "Check in", "Double-check", "Shared vision") |
| Data Analysis and Reporting | Wrote SSRS reports, wrote a rdl report formatter that allowed to define SSRS object styles using selectors and definitions (stylesheets for RDL), made data analysis tools using F#. |
| Testing | Wrote a bit of acceptance tests using home-grown WebDriver based framework that allowed to separate logical and physical concepts. Wrote test plans for manual testing and did that testing myself. |
| Education and training | Made presentations and organized seminars to teach colleagues about modern tools and methods. Set up student and staff code reviews, actively provided feedback and challenges for students working for department. |
| Operations and Developer Infrastructure | Installed and maintained TeamCity, Jenkins and Rhodocode installations, administered Windows production and test servers. |

1995 - 2012, Software Engineer, MetaCommunications Inc., Iowa City, IA

Whatever was necessary. Did a lot of stuff including product design and implementation (C++, C#, SQL, a lot of JavaScript), product implementation on customer sites, marketing, testing (automated and manual), office and personnel management.

References

- Bob Long, President, MetaCommunications, blong@meta-comm.com, 319-3378599
- Ben Barreras, Assistant Director, University of Iowa, barreras@uiowa.edu, 319-3378599
- Valerij Petrlevich, University of Iowa Financial And Business Information Systems, vpetrlevich@uiowa.edu