

Profile

Senior Software Engineer/Architect specializing in building fast and usable web applications.

- Motivated problem solver at all levels: technical, project, and organizational
- Deep understanding of each layer in a modern web application stack
- Patient technical mentor with a focus on elevating quality while keeping momentum

Languages

Name	Years	★★★	Name	Years	★★★
JavaScript	15	★★★★	T-SQL	10	★★
TypeScript	5	★★★★	Shell (sh/cmd/pwsh)	15	★★
C#/NET	13	★★★★	Python	7	★
CSS	15	★★★★	C++	6	★
HTML	15	★★★★	Java	2	★

Expertise

Web Libraries

TypeScript, React, Redux, RxJS, Leaflet, Knockout, jQuery, PostCSS

Server Libraries

NodeJS, .NET Core, ASP.NET, OpenAPI, OData, ADO.NET, Rx.NET

Testing

Jest, Mocha, Karma, JSDom, WallabyJS, NUnit, XUnit

Build/CI

Webpack, Npm, Yarn, MSBuild, NuGet, Jenkins, GitHub Actions, Team City,

Databases

SQL Server, Oracle

Version Control

Git, Mercurial, Subversion, TFS

Projects & Work History

Pandell

Senior Solutions Architect · 2012 — 2020

A market-leading software company specializing in back-office Oil & Gas products as well as custom enterprise applications.

General roles and responsibilities

- Guided the company-wide adoption of npm and NuGet for dependency management.
- Developed critical infrastructure used in all facets of the development process.
- Reviewed practicums, interviewed, and hired multiple developers of junior to senior skill levels.
- Provided and received technical guidance through GitHub-based code reviews, direct mentoring, pair programming, and large scale learning events.

Role: Senior Solutions Architect

- Developed internal tooling and infrastructure that allowed expansion of product suite from 3 to 15+ offerings, all using the same set of libraries and architecture.
- Directed the conversion of JavaScript codebases from script tags to CommonJS to ES Modules and oversaw the company-wide migration to TypeScript and React.
- Built an expansive React component library, from basic building blocks to web maps to virtualized grids.
- Contributed to numerous open source libraries as part of daily work.

Role: Senior Internal Developer

- Built a generic OData API used by multiple projects and customers for ad-hoc integration.
- Prototyped a message bus for inter-product integration that would later be the foundation for a product offering.

Role: Application Technical Lead

- Technical Lead for the .NET/HTML5 rewrite of an acquired suite of Oil & Gas products.
- Developed fluid & responsive web applications, targeting multiple browsers on both tablets and desktops.

TypeScript JavaScript React Redux HTML5 CSS jQuery KnockoutJS C# ASP.NET Web API OpenAPI
.NET Core NUnit Razor SQL Server Git

Quadrus

Software Developer · 2009 — 2012

A software solutions and consulting agency.

Project: IT Invoicing System (Lead Developer, 2011 — 2012)

The billing and invoicing system for internal IT services at The City of Calgary.

- Lead developer, responsible for overall system design and integration with external systems & processes.
- Designed a flexible and efficient data import process, saving users several days of data entry per month.
- Improved validation and accuracy over existing system, leading to increased recoveries for IT.
- Mentored team members on web development techniques and object-oriented design practices.

Project: Activity Tracker (Developer, 2011)

A time entry and invoicing system used for Quadrus Development's consulting services.

- Designed a highly interactive JavaScript-based interface, streamlining the previously cumbersome and error-prone time entry process.
- Automated several manual billing and reporting processes, greatly reducing the required effort for users and administrators.
- Delivered a cross-browser, standards based and mobile-optimized web interface with a focus on usability and portability.

Business Registration (Developer, 2009 — 2011)

A City of Calgary web application enabling businesses to apply for approvals, permits, and licenses via a progressively filtered, multi-step interface.

- Guided project-wide standards and architectural decisions, mentoring City developers on web development and object-oriented design.
- Responsible for significantly improving user experience, applying proven techniques for usability and accessibility.
- Collaborated with several City of Calgary departments to modernize web layout and usability standards for future City projects.
- Significantly increased page speed through site optimization techniques.

C# HTML/CSS/JS ASP.NET jQuery WCF Oracle SQL Server NHibernate MSTest xUnit JSTest

Acceleware

Developer · 2008 — 2009

A company specializing in high performance computation in various industries.

- Led the redesign of a C++ diagnostic support tool allowing end-customers to provide more in-depth diagnostic information to Acceleware's support team, resulting in faster problem resolution.
- Implemented a domain-specific language for excluding specific regression test suites based on a variety of test system criteria.

- Integrated the automated build, test and issue tracking systems, improving visibility of test coverage statistics for all product teams.

C++ Python CUDA Boost SCons CppUnit

Quadrus

Internship Developer · 2006 — 2007

Project: Axia Intelligence Online

An online development centre for educational professionals, enabling the exchange of curricula, project ideas, and other learning resources.

- Responsible for front-end web development, translating designer mockups into cross-browser compatible HTML and CSS.
- Mentored less experienced developers on the best approaches to cross-browser web development.

HTML CSS Java JSF Hibernate Oracle jUnit

Education

B.Sc., Software Engineering, Internship Program, University of Calgary, 2009

Landscape Generator

Lead Developer · U of C · 2007 — 2008

Used openly available Canadian topographic data and satellite imagery to generate 3D maps based on a user-provided region and viewing angle.

- Technical Lead, responsible for architecting the Python-based distributed rendering system.
- Designed a Google Maps-powered frontend for region selection.

Python Django HTML/CSS/JS Google Maps POVRay

References available upon request.