# **Andrew Perrins**

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#### **SUMMARY**

Senior software professional seeks technical leadership position developing for the web.

I care about utility and quality. I believe that good people are a requisite for good software. I am candid and curious, and I look for these traits in the people I work with and the teams that I build. I prefer working with startups.

# **CORE COMPETENCIES**

### **Languages and Platforms**

- · Highly proficient in .NET C#, Typescript & Javascript; experienced in Python and Ruby
- · Azure development & deployment experience (web-sites, VMs, service-bus queues)
- Deep understanding and familiarity with .NET BCL, CLR, generics, memory and resource management, threading models, attributes, LINQ, DLR, and async-await/Taskbased programming
- Wide range of experience on the ASP.NET web development stack, including Web API, MVC, and SignalR; managed IIS deployments
- Extensive client-side skillset: Angular, CSS/SASS/LESS, NodeJS (Grunt & Gulp, Bower); lodash/underscore, moment, Bootstrap, Zurb Foundation
- · Distributed systems design & development with WCF, remoting, Firebase, and Meter
- $\cdot$  Experience with dozens of MS and  $3^{\rm rd}$  party libraries and platforms including ADO.NET, MEF, Autofac, DevExpress, Telerik, Entity Framework, Owin, Moq, Unity, Postsharp

#### **Databases**

- Extensive practical experience with relational data, SQL, and ORMs: SQL Server and Entity Framework, SQLite. Experience in query performance tuning, modeling, disaster recovery, replication, reporting, and ETL
- Document (NoSQL) database, and key-value in-memory store and caching experience used in web development with MongoDB and Redis

#### Leadership, Methodologies, and Product and Team Management

- Mentoring and constructive coaching experience. Experienced in building developer team strength, trust and confidence through candor, transparency with stakeholders, code reviews, and test-focused, continuous-deployment environments
- Have worked and nurtured teams under several variants of agile SDLC methodologies, including Kanban, XP, and running scrums. Practical experience with feature estimation, and project velocity
- $\cdot$  Source control, and work-item tracking in VSO, VSTS/TFS, and Git

## 2015 Co-Founder, Edmundian LLC

## Numerex Corp. - Connection Visibility & Analytics

Worked on an IoT/Multiple Virtual Network Operator project, building a real-time connection visibility and diagnostics system

- · UDP datagram parsing in C# from Netflow (Cisco router) packets
- Restful Web API for subscription to IMSI (wireless network ID) to trace network connection and data streams, plus SMS packets for internet-connected devices
- Using ServiceStack C# Redis library, built Backplane for SignalR with custom local cache to support cluster scalability in order to handle packet volume behind F5 load-balancer
- · Implemented browser client using HTML5/JS technologies (Angular, SASS, underscore)
- Created two Angular directives packaged in single JS file for easy distribution and drop-in to Numerex's existing portal: JS, CSS and HTML templates were included in single-file distro; CSS dynamically loaded on module run
- Implemented grunt build process to support directive distribution, with separate task for self-hosted site

#### QuickPacer

- Developed Chrome browser extension to add value to the segment of the legal industry that consumes Pacer (public access to court electronic records)
- $\cdot$  Extension coded in Typescript added features into existing government sites such as data retention and file storage
- Injected content script extracts structured data from DOM using JQuery, and persists that data to Web API backend. UI is injected to Pacer site to embellish its Perl-based legacy structure
- · Typescript/Angular client-side implementation on public-facing site used for binding and client services
- · Cloud: Employed Azure VMs, SQL storage, and File storage for site hosting, binary file persistence, and storage of large volume of bankruptcy filing summary data
- Mongo document storage for full bankruptcy case data using C# driver and employed LINQ to query via Web API when loading specific cases, or summary data on public site
- · Source managed in Git (Bitbucket)
- · Gained managerial, financial, and marketing competencies in the context of the business of software

## 2013-2014 Software Architect, MaxExchange LLC

#### MaxEx - Electronic Secondary Market Loan Exchange

- Built and managed co-located team for well-funded startup, and developed architectural foundation. Product is an electronic exchange for trading consumer loans on the secondary loan market. Customers include J.P. Morgan, Chase, and Fannie Mae
- Set up and coded against Azure infrastructure using VMs, and Service-Bus queues; queues
  were used for reliable message delivery across 'mostly available' services, and to accept
  messages from vendors without loss. Used custom WCF binding (NetMesageBinding) to
  automatically perform queue polling; message publishing was done over a RESTful endpoint
- · Implemented HMAC authentication (HTTP header-based) in .NET (commonly used with AWS) to integrate with 3<sup>rd</sup> party (Adfitech) to authenticate requests for loan data OCR'd from sent documents
- · Set up frameworks for MVC and Web API infrastructure including NLog; built out Angular codebase and patterns for team to follow; configured session state service for scalability
- · Postsharp used to handle logging and tracing call metrics for reporting

#### 2008-2012 Senior Developer, Turner Broadcasting System

#### **Linear Advertising Proposal System Rewrite**

- Developed web-based single-page application to manage Turner's proposal system for processing \$4B in annual revenue and interfacing with hundreds of ad agencies across the U.S.
- · Backend built in ASP.NET Web API, MongoDB, SQL Server
- · Integrated with ElasticSearch using "Nest" library or very high performance and scalability search. Also prototyped Lucene.NET before moving to Elastic
- Test shims and stubs brought code coverage to 97% using MS Fakes
- · Implemented SRSS packages to support EDI for reporting team

#### Stewardship System

- Lead development team to build Stewardship application, "Lighthouse" for the company's EDI division, reducing invoicing time, paper waste, re-keying, and electronic delivery of order status through third-party hub
- Implemented three-tier system with WCF front-end, WCF services, and SQL-Server 2008 persistence layer
- · Entity framework ORM (DB-first) used at the application layer
- Used MEF (Managed Extensibility Framework) to allow plug-in client-side architecture for other teams to add functionality
- · Constructed server code using Autofac Dependency Injection to support mocking interfaces

#### **Marketplace Ad Sales**

- Managed development team for four core applications to the company's linear ad-sales systems: reference repository, inventory management, ordering system, and selling-title management
- Optimized SQL server queries and SPROCs for legacy code; added NLog to codebase for troubleshooting
- Enhanced Windows-forms based application with new features, and performance tuning code and uncovering memory leags using RedGate Ants memory and performance profilers

## 2006-2008 Expert Software Developer, Turner Broadcasting System

#### Crossroad Log and Copy Management, and Spot Scheduler

- Completed spot trafficking project with three-year, forty-person team, to manage all of Turner Broadcasting's linear advertising television spots across more than a dozen networks. Project highlights include: integration with solver platform using CPLEX for placing spots within stringent constraints to maximize revenue and reduce liability; copy) assignment for on-air broadcast via user-defined rules; precise schedule development for down-to-the-second precision in managing on-air log
- · Implemented WWF/WCF service to manage workflow of an order and trace spots through to airing date and invoicing
- · Heavily SOA using WCF pre-release bits through partnership with Microsoft Connect
- · Distributed transactions using MSDTC and WCF calls for financial data
- WinForms and with WPF-controls where necessary implemented with surface-mapping,
   NInject for testing, all using the MVVM design pattern
- · Custom WCF behaviors and bindings for authorization/authentication, and logging
- · Hand-written SQL queries for CRUD ops; later replaced with Ling to SQL as it matued

#### 2002-2005 Software Developer, Cotterman Consulting & McCalla Raymer

#### **Accurate Docket Sweep**

- Developed system employed by several national banks (including Bank of America, and Wells Fargo) to mitigate risk associated with bankruptcy filings in loan portfolios
- Targeted .NET using C# with SQL Server store and SOAP-based (ASMX) services. Developed Windows Forms native client for internal customers, and ASP.NET Web Forms site for firm users
- · Wrote Regex-based HTML screen-scrapers
- Built multi-threaded HTTP web-clients and multiple nodes for scale. Worker nodes coordinated with server using Remoting where nodes were responsible for data retrieval
- $\cdot$  SQL server partitioned across servers for scale using distributed partitioned view over the social security number as key
- Built custom WinForms controls for graphing case numbers across jurisdictions and for easily identifying missing cases in repository
- Developed algorithms for identifying individuals in bankruptcy using name-matching algorithms like Soundex

## **EDUCATION**

2002 BS, Computer Science, Georgia Institute of Technology