## **Rob Das**

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# **Professional Summary**

As a senior software developer with over 20 years of experience, Rob Das has used his combination of computing science degree, I.T. training, and years of progressive industry experience in enterprise level, mission critical environments, to deliver solutions that meet specific business needs. By specializing in the applications domain of information systems development, Rob has gained valuable experience across all aspects of the design, deployment and operations lifecycle. Rob's soft skills include systematic and methodical problem solving; diplomatic people skills; and clear, logical communication.

## **Technical Skills**

- .NET web development
- ASP.NET
- Azure DevOps
- common design patterns
- frontend: React, Angular, Bootstrap
- Microsoft Entity Framework
- MVC.NET
- programming, coding, debugging
- RESTful API
- SQL Server, Oracle, Cosmos DB
- test driven development
- version control systems

- Agile development
- Azure App Services
- C# programming
- documentation
- Html, JavaScript, CSS
- Microsoft Identity Platform
- PowerShell
- requirements analysis
- software design
- systems analysis
- unit testing
- Visual Studio and VS Code

## Certification

- Microsoft Azure Developer 2021
- CIPS certified ITCP 2009
- Microsoft Certified Professional 2006
- Certified Programmer Sun Java 2 2001
- CIPS certified I.S.P. 1998

- Microsoft Azure Fundamentals 2020
- ITIL Foundation 2007
- Oracle DBA, OCP 2004
- Oracle Developer, OCP 2000

## **Education**

University of Alberta, Bachelor of Science in Computing Science, 1989

## **Experience**

# DTEK Consulting Services Ltd. Owner, Manager, Consultant

Apr 2009 – Present

## **Clients to Date**

Government of Alberta, GE, City of Edmonton, AMA, APEGA, EPCOR Utilities

- Provided clients with software development consulting services, specializing in .NET
- DTEK's business model is for consultants to alternate between providing consulting services to clients and completing approved professional development activities such as internal projects, and research.
- More info about DTEK can be found here <a href="https://rob-das-win.azurewebsites.net/about">https://rob-das-win.azurewebsites.net/about</a>

## **Recent Internal Projects**

### **Azure Developer**

Jan 2022 – May 2023

- Completed the "AzureDev" project at DTEK, migrating the on-prem corporate website to Azure.
- Redesigned and rebuilt the corporate website to run in a serverless cloud environment.
- Used Azure App Services web apps, APIs, and Function apps to modernize the architecture.
- Coded with C# .NET Core, and with the SDKs for MSAL, Azure Functions, Cosmos DB.
- Setup Azure Active Directory, single tenant model, for authentication and authorization.
- Moved all application secrets to Azure Key Vault.
- Created a dev database, by repurposing an old server to run the Cosmos DB emulator.
- Coded Azure Functions as microservices, to implement a restful API.
- Moved project onto Azure DevOps Boards, Repos, and a YAML based CI/CD pipeline.
- Tools used: C#.NET; AAD; Azure App Services; APIM and Open API; Cosmos DB; Azure DevOps; Azure Functions; Azure Key Vault; Azure CLI; EF Core Cosmos DB provider; Git; JWT ID and Access tokens; Microsoft Identity Platform; MSAL.NET; RBAC; VS Code; YAML CI/CD pipeline.
- Want to know more? See the AzureDev project documentation published at: https://rob-das-win.azurewebsites.net/html/README.html

### **React Developer**

Jun 2023 - Dec 2023

- Completed an eCommerce simulation mini project "DTEK Online Store" exploring how to use the Azure cloud to host a shopping website with a React front end.
- Tools used: Azure App Services; FTP-deploy; React; html; CSS; JSX; Json; Azure DevOps; WSL2; Bash
- Want to know more? See the DTEK Online Store app, and the documentation, published at: https://rob-das-win.azurewebsites.net/Documentation/OnlineStore

## **Accomplishments**

- Certification-based Research and Study (2020/21)
- Independent Research and Study (2018)
- Infrastructure Project (2015/16)
- University Courses (2012)

## **DTEK Consulting Services Ltd.**

## **Certification-based Research and Study**

Oct 2020 - Dec 2021

- Professional development activities full time student, researcher, author.
- Completed online training from various sources.
- Attended Microsoft Ignite 2021 conference and participated in the conference challenge.
- Wrote my own textbook and published it online at: https://robidas.github.io/static-site/Exam-Prep-AZ-204.pdf
- Passed Microsoft exams AZ-900 and AZ-204 to earn the professional designation:
   Microsoft Certified Azure Developer
- Kept skills up to date by passing the annual Azure Developer certification renewal exams

### **EPCOR Utilities**

## **Senior Software Developer**

Dec 2018 - Apr 2020

- Served on contract at EPCOR, a Canadian utility company, as a senior software developer.
- Worked with the CRM team providing development and operational support to web applications including My Accounts, PMDB, and GeoFIT.
- Developed an intranet web-based performance monitoring database application (PMDB) to manage customer service quality in the energy services call center.
- Linked PMDB to the HR system to pull employee data, including position titles used for role-based authorization; and reporting lines used to enforce employee confidentiality.
- Provided enhancements to PMDB including importing legacy system data; creating an aging mechanism for employee data; and various user interface enhancements.
- Assisted with unit testing of the "failed login attempts" tracking system, and with enhancements to the "power outage notification" wizard for the 2018/Q4 release of My Accounts.
- Upgraded the Customer Engineering Services (CES) module for the 2019/Q1 release of My Accounts.
- Developed a component for the GeoFIT asset management application to manage fire hydrant flags.
- Tools used: Angular; ASP.NET MVC Core; Azure DevOps; Bootstrap framework; C#; Entity Framework; Git; IIS; JavaScript; Jenkins; Jira; jQuery; LINQ; Node; NPM; Octopus; Oracle APEX platform; React; Serilog and Seq logging; SQL Server; Toad for Oracle; Typescript; Visual Studio and VS Code; Windows Server;
- **Best practices:** agile scrum; enterprise architected environment; low code development; object-oriented programming; quarterly release management; unit testing; web portals development.
- Database: SQL Server; Oracle

# DTEK Consulting Services Ltd. Independent Research and Study

Jan 2018 – Nov 2018

- Professional development activities full time researcher, sys admin, software developer.
- Completed online training from various sources.
- Updated corporate network to more closely replicate common environments, using Hyper-V to host domain controllers, file, database, TFS, web, batch job, and application servers.
- Rewrote DTEK's website using then current (2018) versions of .NET Core, Bootstrap, React and Angular.

#### **APEGA**

## **Senior Web Developer**

Nov 2016 – Dec 2017

- Served on contract at APEGA, the Association of Professional Engineers and Geoscientists of Alberta, as a senior software developer.
- Worked with the application development team in the role of senior developer for the member and corporate self service center web portals.
- Provided guidance on how to effectively perform modifications to legacy systems by following design patterns and best practices.
- Assisted with the CBA (Competency Based Assessment) and Name Change sub-projects of the Registration Renewal project.
- Demonstrated how to refactor disorganized code to be maintainable.
- Provided all project deliverables as per requirements, with many quality improvements including code refactoring to implement separation of concerns; domain service and repository layers; and encapsulation of legacy code with the façade design pattern.
- Showed benefits of the refactoring by creating a suite of unit tests for business logic, allowing developers to hand over high-quality code.
- Delivered high quality, well written, thoroughly tested code for all project deliverables.
- Tools used: ASP.NET MVC and Web Forms; Bootstrap framework; C#; JavaScript; jQuery; LINQ; Visual Studio; Windows Server; IIS; SQL Server; Stored Procedures; NUnit; NSubstitute; Atlassian cloud-based project tools (Jira, Confluence, Bitbucket, Bamboo).
- Best practices: Agile Scrum and Kanban; design patterns; domain driven design; enterprise architected
  environment; interactive web development; Web portals development; object-oriented software
  development practices; refactoring; unit testing; cloud-based project management tools.
- Database: SQL Server

#### AMA

## **Senior Web Developer**

Aug 2016 – Oct 2016

- Served on contract at AMA, the Alberta Motor Association, as a senior software developer.
- Assigned to the Eden project online driver education admin system.
- Developed a location module to manage all AMA locations organized hierarchically, and present them graphically as a collapsible tree, using Bootstrap Treeview
- Created all views based on wireframe mock-ups developed by user experience experts.
- Assisted with development of unit tests and integration tests.
- Took ownership of the first user story "student program selection by location", for delivery into production.
- **Tools used**: ASP.NET Core MVC and Web API; Bootstrap framework; C#; jQuery; JavaScript; LINQ; NHibernate; IIS; SQL Server; TFS; XUnit; NSubstitute; Selenium testing framework
- Best practices: model-view-controller; enterprise architected environment; interactive web development; repository design pattern; object-oriented programming and design; object relational model; responsive web design; intuitive user experience; automated testing
- **Database**: SQL Server

# DTEK Consulting Services Ltd.

## **Infrastructure Project**

Nov 2015 - Jul 2016

- Professional development activities full time web developer, technician, sys admin, project manager.
- Ran Cat6 ethernet cables through the walls, mounting RJ45 jacks and wall plates, to connect offices together using secure wired connections instead of Wi-Fi
- Built a business network for software development, web hosting and corporate administration, using modems, routers and switches, Windows Servers, registered domain names, static IP addresses, portforwarding, virtual hosting.
- Installed, configured, and tested then current (2016) IIS extensions for ASP.NET Core 1.0 on the external server, and used it to develop and host DTEK's custom-built company website.

# City of Edmonton Web Developer

Aug 2015 - Oct 2015

• Short term contract to assist with minor refactoring of a .NET Web Forms application to use MVC.

## City of Edmonton Web Developer

Feb 2013 – May 2015

- Served on contract at the City of Edmonton, as a web developer.
- Participated in the development of the eServices web portal that was created to provide online access for citizens to conduct all residential and commercial business needs with the City of Edmonton.
- Build cross-app functionality: login, registration and password recovery pages; city corporate branding look-and-feel; remote logging; unhandled exception management; user profiles to auto select the appropriate start page; fine-grained permission level security; separate admin site; breadcrumb and menubased site navigation; landing page rotating banner; browser plugin detection.
- Assisted QA team to develop test suites in TFS.
- Refactored business logic to follow a layered application architecture.
- Participated in version 2 of the eServices portal, using more up-to-date development tools, and assisted with the street vendor business licensing module.
- Tools used: Ajax; Angular; .NET framework; AutoFac DI; Bootstrap; C#; Colorbox; Entity Framework;
  HTML/CSS/JavaScript; HTTP Handlers; Microsoft Identity 2.0; IIS; jQuery; JSON; Kendo UI; LINQ; Log4Net;
  master/content pages; MIME types and plugins; Modernizr; .NET MVC and Web Forms; ScrumDo; security
  (login controls, Roles, Permissions); Source Safe; SQL Server Management Studio; Stored Procs; Telerik Rad
  Controls and Kendo UI; TFS; Unobtrusive jQuery validation; user controls; web services; XML Sitemap
  controls;
- Best practices: agile scrum; data driven web development; declarative and imperative role-based security; dependency injection; managed extensibility framework (MEF); object-oriented design; prototyping; responsive web frameworks; service-oriented architecture; standardized website look-and-feel
- Database: SQL Server

## **DTEK Consulting Services Ltd.**

### **University Courses**

Feb 2012 – Dec 2012

- Professional development activities full time student.
- Took a 3-course sequence from Athabasca University and got straight A's
- COMP 266 Introduction to web development
- COMP 348 Network programming
- COMP 466 Advanced technologies for web-based systems

#### GE

## **Software Developer**

Apr 2011 – Jan 2012

- Served on contract at General Electric Intelligent Platforms, as a software developer.
- Provided software development services for Proficy SOA, GE's manufacturing execution system which implements manufacturing industry standards and best practices.
- Assisted with upgrade projects for localization and logout automation.
- Migrated controls from desktop to browser by moving them from WPF to Silverlight.
- Tools used: .NET; Balsamiq; C#; Confluence enterprise wiki; Daemon Tools; IIS; IL-Spy; LINQ; NUnit; ReSharper; Silverlight; SQL Server; Subversion source control; Team City; TFS; Visual Build Pro; Visual Studio; WCF; WPF; XAML;
- **Best practices**: agile; build automation; continuous integration; MVVM and MVC design pattern; object/relational data mapping service; object-oriented development; SOA; unit testing;
- Database: SQL Server;

# Government of Alberta

## **Systems Analyst**

Sep 2009 – Mar 2011

- Served on contract at the Government of Alberta, Department of Energy, as a systems analyst.
- Supported the following applications: corporate accounting and reporting system, quarterly reporting, information letters, oil royalty and tenure web forums, time entry and reporting, contract management system, contract compiler, and freehold mineral tax.
- Assisted in moving the contract management system's Oracle backend to SQL Server.
- Worked on the capacity planning project, migrating applications onto new servers.
- Participated in planned application upgrade releases, system integration testing and disaster recovery planning and testing.
- Documented deployment procedures, migration and disaster recovery plans, use cases.
- Tools used: ASP.NET; Azman authorization Manager; C#, Cluster Administrator; Crystal Reports; HP Quality Center test automation tools; HTML/CSS/JavaScript; Ibatis; IIS; Infragistics; Log4net; Microsoft Office; Microsoft Project; Microsoft Access; .Net Remoting; Oracle; SOAP; SharePoint; SQL Management Studio; SQL reporting services; stored procedures and triggers; T-SQL; UNIX; VB.Net, VB Script; Visual Studio; Windows Server OS;
- **Best practices**: encryption; enterprise architecture (GAEA); N-tier architecture; object-oriented development; regression testing; source control; test driven development; UML; unit testing;
- Database: SQL Server; Oracle; Access;

# Sierra Systems, Edmonton Consultant

Apr 2001 - Jan 2009

## **Clients**

Edmonton Police Service, Workers Compensation Board of Alberta

# Workers Compensation Board of Alberta .NET Developer

May 2006 – Dec 2008

- Worked as part of an application maintenance and support services team.
- Served as lead developer for the LCR web-application.
- Served as application support coordinator for the DECC application.
- Provided technical support for PC-Bond and CLMS.
- **Tools used**: .NET; C#; Crystal Reports; DB2; IIS; html/CSS/JavaScript; jQuery; SOAP; stored procedures; Source Safe; T-SQL; VB.Net; Visual Studio; Windows Server; XML; XSLT;
- Database: SQL Server; DB2 data warehouse; Oracle

# Edmonton Police Service, Information Technology Branch Systems Analyst

Apr 2001 - Apr 2006

- Supported and maintained "PROBE", the records management system of the Edmonton Police Service.
- Tools used: Oracle Forms and Reports; PL SQL; Java; Eclipse IDE; J2EE; Perl; VAX VMS; C/C++; Visio.
- Database: Oracle

# For earlier experience please ask

## **Projects**

- AzureDev (DTEK 2022/23)
- Registration Renewal CBA (APEGA 2016/17)
- eServices (CoE, Current Planning 2013/15)
- Capacity Planning (GoA, Energy 2010/11)
- LCR New Releases (WCB 2006/08)
- Project APSNet (EPS 2004/05)
- AUSIM (Athabasca University 1997/2000)

- PMDB (EPCOR 2018/20)
- Eden Project (AMA 2016)
- Proficy SOA (GE 2011/12)
- CMS Upgrade (GoA, Energy 2009/10)
- Project PLATO (EPS 2005/06)
- MMR2 (GoA, TRA 2000/01)

Short descriptions can be found here https://www.linkedin.com/in/robidas/details/projects/

## **Affiliation**

## CIPS (Canada's association of I.T. professionals)

- Member since 1998.
- Served on CIPS Alberta, Board of Directors 2010 2012 (volunteer).