RUSS PROFANT

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PROFILE

- **Solution-oriented IT architect** with experience at ***Canada Life, IBM/CIBC, Citi Bank, RBC, FundSERV, Sunnybrook Hospital, Morgan Stanley, Hewlett Packard, Canada Post***.
- **10+ years' experience in solution and enterprise architecture design**, on-prem, in the cloud, functional and non-functional using TOGAF guidelines and artifacts
- **15+ years' experience in the Cloud** in IAAS, PAAS, and SAAS solutions. Top expertise in AWS with the highest certification.
- **10+ years' experience in microservices design and migration** from a monolith application to a microservices based system.

CERTIFICATIONS

TOGAF 9.2 Certified Enterprise Architect

AWS Certified Architect Professional
473403449

HL7® FHIR® Certified

IBM Certified Microservices Developer

SAMPLES OF WORK (SOW)

- **Decades of data management experience**
- **Solution Architecture document**
- **Enterprise Architecture document**
- **Monolith To Microservices Journey**

THOUGHT LEADERSHIP

- ✓ Why Cloud?
- ✓ EA is not for everyone
- ✓ Is the age of Agile over?

EXPERIENCE *BELOW LISTS CONTAINS SELECTED ENGAGEMENTS ONLY*

IT Consultant

MAY 2024 – Current | PC4IT, TORONTO, Ontario

✌ **Primary Achievement – Created the most modern technical solution in the client's portfolio in AWS to host client's product database and make it available across the enterprise as a REST API**

Technologies: AWS technologies: WAF, CloudFront, CloudFormation, API Gateway, Lambda, RDS-MySQL A-Z, IAM, S3, Amplify

- Created a reference AWS REST API-based architecture for the enterprise-wide product repository using core AWS services. The repository serves as the reference data for the segregated fund e2e business needs and all 20+ dependent internal and external systems
- Created a CloudFormation script to install the full stack in the client's AWS account together with all the tools and configurations to manage the system in a low-cost and efficient way

Enterprise Architect

JUN 2023 – MARCH 2024 | Canada Life, TORONTO, Ontario

✌ **Primary Achievement – Pioneered a new top level EA deliverable called "Target Architecture and E2E Sketch" which became a gold standard across the EA**

Technologies: Mainframe, Windows, Unix, Linux, AWS, Azure, SaaS, DB2, Oracle, MSSQL, Java, .NET, NodeJS, ReactJS, Kafka, REST API

- Hired by Chief Architect to oversee a modernization of segregated fund management in Wealth/Investments E2E in an organization with huge technical debts throughout the architecture landscape to be a cloud technology driven organization and for the business to better align with the current segregated fund market in Canada. This was a multi-year 20-million-dollar project, the most complex project I have ever worked on.
- Designed AWS Data lake for 14 data interfaces. This included expanding the in-house meta-ETL system to AWS and using it to re-design the current on-prem data interfaces to take full advantage of AWS services.
- Helped to redefine the business case for the project listing several possible strategic approaches with their pros/cons and as well as costs. Presented to the steering committee and received a signoff.
- Collaborated with the sponsors, stakeholders, vendor, managers, owners of other 20 or so systems in the ecosystem on creating "Target architecture and End-to-end sketch" as the main deliverable and the key milestone in the projects design phase, presented it to the Architecture council discovered and advised the key stakeholders on new unexpected risks and their possible mitigations.
- Chief architect for another enterprise project 'the closure of the mortgage lending business' and transferring the existing mortgages to a new vendor. Again, created 'Target Architecture and E2E Sketch' as the key project deliverable. Worked with business to understand and mitigate the risks, oversee the remaining business migration to the vendor, introducing a new mortgage referral program for the CL agents and streamlining the backend data processes to correctly account for the business change.
- Worked on a strategy for Cloud migration for 'Investments' group within the firm: selection of the cloud provider, cloud operations, governance, security, CI/CD, roadmap, costs.

Senior Solution & Enterprise Architect

MAR 2021 – MAR 2023 | IBM/CIBC, TORONTO, Ontario

✌ **Primary Achievement – No production/failure/outage/bug on any of my projects**

- Worked as an expert consultant for IBM on a contract to CIBC Personal Banking group in improving and re-architecting their eBanking acquisition (Cart) and OnLineBanking (OLB) application channels.
- Technologies, methods, processes included API (REST - Swagger/Open API, GraphQL, RAML, gRPC), OAuth2, OIDC, SAML, microservices, AWS, Azure, design, implementation, documentation.

- Most projects had dependencies on many functional areas/groups/LOBs in the bank such as fraud (real time and non-real time), security, analytics, AML, reporting, legal, compliance, document storage, data storage. Had to work closely with stakeholders from all these groups to satisfy their requirements.
- Worked on 10 projects in all with the combined budget of over $20 million.
- Participated in the key project of the LOB, migration of OLB to Azure cloud
- Most projects were classified as large with budgets over $1 million and hence were programs not just projects. All were either new applications or extensions to existing apps for banking product acquisition. Most included integrations with external vendors such as SecureKey/Interac, Visa, Mastercard, Canada Post and other vendors.
    - SecureKey/Verified.Me integration with all acquisition apps (1.5 million) and enterprise Compliance Authority program
    - SmartStart - first deposit account application for people under 18 in Canada (1.4 million)
    - CIBC small business credit card acquisition, 4-phase program (10 million)
    - SmartPlus - financial product bundle in account acquisition (2.1 million)
- Worked on a few smaller under $500K projects to improve and extend the existing business functionality for Digital Cart (product acquisition) flows for deposit and credit card products.
- Among those were several federal and provincial government compliance initiatives such as CAMLR (Federal Anti-Money-Laundering for corporate entities), QB Bill 53 (Credit Freeze) and others.
- For each project created an HLD (High Level Design) document that describes the solution in eBanking/back-end technical terms using appropriate diagram, matrix, and list artifacts.
- Used the HLD as the main artifact to provide walk-through and guidance to other teams involved such as development, testing (functional, API, performance), UX design, content, in providing their High-Level Estimates as well as planning and designing their artifacts.
- On a larger project present the High-Level Design document and related artifacts to the IT and business directors for a sign off
- Designed 4 new microservices (3 for OLB, 1 for enterprise - Verified.Me as a shared service) in the current eBanking portfolio total of 30+ microservices using existing LOB's design practices as well as enterprise infrastructure called APIF (Application Integration Framework)
- Worked closely with Pega system, enterprise multi-channel banking platform, integrating eBanking microservices with it as well as on a migration of Pega to AWS
- Participated in senior leadership project approval process explaining the technical and functional scope of projects.
- Provided leadership and guidance to both onshore and offshore development teams by acting as adviser, trouble-shooter, and mentor on the whole system or its functional and technical components.

Senior Solution Architect

MAY 2017 – JUN 2020 | CITI BANK, MISSISSAUGA, Ontario

✌ Primary Achievement – Migration of a complex enterprise monolith to microservices architecture in record time

- Full ownership of the complete presence of the Capital Markets Research group on the internet
- AWS S3 integration as archival storage and backup medium for all sites

- Worked on a POC to migrate Rendition to AWS.
- Initially simply performed ‘lift & shift' or rehosting (copied all components) to AWS for testing purposes.
- Later worked on rearchitecting the system to make use of AWS native services including VPC, ELB, Fargate, S3, CloudFormation, SNS, SQS, RDS, Lambda, API Gateway, Step function, KMS to achieve performance improvements, improved stability, and maintainability as well as cost savings.
- This included the business's central system called Rendition used to publish research documents on the Citi capital markets portal www.citivelocity.com as well as the Research portlet on that portal and several independent marketing web sites.
- 3 JEE projects supporting the Research portlet at citivelocity.com consolidating and reorganizing them based on their back end and front-end functionality.
- 2 microservices (analyst and company pages) using ReactJS as UI and the above J2EE projects as back-end REST APIs
- 3 marketing websites architected with WordPress CMS as backend REST API/data layer and Gatsby as front-end UI
- Spent most of my time working on the global public Rendition system with the following physical architecture:
    - 12 large physical Linux servers spread around 3 global regions 4 servers per region running on premises.
    - Using Akamai as the global CDN provider integrated at the infrastructure/network level.
    - Using NAS storage hardware mounted regionally on servers to store the document files locally for improved regional performance.
    - System Architecture was extremely complex with no design document or documentation:
        - Apache Load Balancers
        - WebLogic cluster application servers later migrated to Tomcat.
        - Monolith JEE Rendition application running under 2 separate Uri paths, one for user services and one for admin web services.
    - The application was composed of UI and multitude of data models and services all under a single project, hence monolith.
    - SOAP synchronous integration with the back end custom BPM engine later migrated to REST async integration.
    - REST API data services provided by 2 different Data Services group, Market Data and Publishing metadata using ehCache for data caching.
    - Oracle db and iBatis ORM to store processing data, added later to track processing analytics
    - REST API component authorization services provided by Security Services
    - Kafka for log aggregation and streaming.
    - SpringBoot based separate project as PDF-type document provider integrated with Rendition to prevent document leakage to unauthorized users (by providing PDF-like document without the ability to print or save it)
    - AngularJS UI (document viewer) later migrated to React for better performance.
    - PhantomJS tool (using NodeJS execution engine) as image producer including images of the published documents for regulatory purposes as well as charts for business purposes integrated into the documents themselves.

- In the second iteration of the architecture, re-architect the system to extract 2 main back-end processes from the monolith and make them CLI-based independent apps, creating artifacts as above to describe the changes to the architecture and the dependencies.
- This greatly improved system stability, improving the processing rate to 99.9%
- In the third iteration of the architecture, re-architect the system to microservices design by splitting the 2 core back-end processes to about 15 stand-alone HTTP-based microservices respectively to further fine-tune the scalability as well as make the services available independently to the end users.

Solution Architect

SEP 2016 – MAY 2017 | RBC, TORONTO, ON | DSP SYSTEMS, BRAMPTON, ON

✌ Primary Achievement – 100% improvement in throughput and performance of an ETL system

- Re-architected an ETL-type system called EBR at RBC
- Developed POC for moving the whole ETL system to AWS using the 'rearchitect' migration method
- EBR was a master data reference source for the firm for business entities, their hierarchical ownership relationships, and the rolled-up loan exposure by the firm to these entities at various hierarchy levels.
- Oversaw the vendor-provided development team in India as well as two local developers.
- EBR system architecture:
    - Shell scripts to load data
    - Sybase database acting as the staging, processing, and final data destination.
    - Java engine incorporating business functionality.
    - AngularJS as UI to manually override system decisions by business analysts.
- Reverse-architect the EBR system (no real documentation and no SME) to create architectural artifacts to describe the base architecture in conceptual and physical terms using data flow, context, and sequence diagrams.
- In the second phase re-architect the overall system at the logical and physical component level to improve the overall speed, agility, stability, and availability of the system using TOGAF artifacts including ADD (Architecture Definition Document) and ARS (Architecture Requirements Specification)
- Present the new architecture to the program and team management for approval
- In the third phase fully re-architect the whole system to turn it from end-of-day master reference data repository to an intra-day, real-time REST API based data service.
- Update the existing artifacts to describe the changes in the architecture.
- Migrated health care provider booking system www.mydocschedule.com from a IAAS provider to a PAAS – AWS at DSP
- Re-architected the system to take advantage of AWS services including VPC, private subnets, ELB (Application Load Balancer), Route 53, autoscaling, multi-AZ RDS deployment for MySQL at DSP
- Using REST services integrated the system with Zoho Mail and Twilio as telephony and SMS provider for appointment reminders by phone at DSP

Application Architect

MAR 2016 – JUL 2016 | VISIONMAX, ECOMMERCE, MISSISSAUGA, ON

- Involved in development and maintenance of applications for restaurant industry, such as Pizza Pizza, East Side Mario's, and Swiss Chalet
- Worked on data architecture, primarily data migrations from legacy systems as well as the system architecture of the core system for a new client Panago Pizza
- Designed and developed a process for migrating 200M historical order, customer, and other related records from MSSQL to an AWS MySQL db in three weeks.
- The process was fully stateless (repeatable) and consisted of 4-5 steps to achieve full client onboarding with all the client's historical data in about 3 days as opposed to 8 months using the company's previously developed transfer engine based on Java.
- Re-architected the system to provide near-real-time data synchronization between the new application and the legacy system to be able to run the new and legacy systems in parallel while the new system was being rolled out across the country using Java concurrency framework.

IT Consultant | Senior Developer

MAR 2014 – JAN 2016 | MyDocSchedule.com & SUNNYBROOK HEALTH SCIENCES CENTER, GTA, ON

- In consecutive roles, customized an open-source EMR (Electronic Medical Record) called Oscar for local family physicians, developed a SaaS scheduling system, and worked on the development of a large web-based hospital application called EPR in an agile environment for a top hospital in Toronto.
- Worked as a designer and developer on migrating the back-end data services of Sunnybrook custom EMR application from ColdFusion to NodeJS
- Worked as a developer on a comprehensive patient medical lab test ordering system funded by the Ministry of Health planned to be implemented across Ontario hospitals.
- Achieved 30%-70% the performance improvement of the EMR application by performing SQL query optimizations across the system front and back.
- Developed SaaS web site to allow doctors schedules and appointments from the office-based Oscar with the website in near real-time.

Solution Architect

2013 – 2014 | FUNDSERV, Toronto, ON

- Hired by the organization to design, develop, and implement an enterprise automated testing system in an agile development environment to help the firm in migrating its customer data platform from text-based (csv) to xml-based.
- Performed a full SDLC for the automated testing system called FATT (FundservAutomatedTestingTool) covering the roles of project manager, system designer, system developer, system tester and wrote the full documentation.
- The system enabled FundSERV to test any of the back and front-end systems in full or in part and accommodate future testing requirements without writing any new code.
- The tool slashed the maximum manual testing time from three days to five minutes.
- The tool allowed the testers to design and run tens of thousands of tests in minutes or tens of minutes.

Senior Developer / Team lead

JAN 2009 – OCT 2010 | CANADA POST, Mississauga, ON

- Development lead for the enterprise data renovation project called Data Broker
- This was an ETL data routing and transformation system processing data feeds between the regional centers and the central data hub in Ottawa.
- Led a team of 6-8 developers.
- The main technology used was Java EE, NetBeans, Glassfish, SOAP messaging, XML, XSL etc.

IT Consultant / Team lead

2004 – 2009 | MORGAN STANLEY, Mississauga, ON

- Development and Support lead for the enterprise data group managing the full life cycle of the firm's reference data repositories for equity, fixed income, and corporate actions.
- Led a team of 8 developers.
- Our team acted as data steward and trustee for the global end-of-day reference market data.
- Developed and supported hundreds of data feeds from global vendors like Bloomberg, Reuters, Moody's, Fitch etc.
- On 24x7 and 365 days a year basis with 100% success rate daily
- When a job failed, it was rerun to success. Failure “didn’t exist”.
- Acquired deep technical and business expertise in Bloomberg data universe, index data sources including MSCI indices and many others.

Senior Developer / Jr. Project Manager

1998 - 2002 | HEWLETT PACKARD CANADA, Mississauga, ON

- Implemented COTS document imaging solution called FileNet (now owned by IBM) shared by HP Credit and HP Finance Latin America
- Performed the functions of a project manager, technical resource, business analyst, support analysts and all-around nanny to all stakeholders.
- Business achievement: $0 cost to the internal clients thanks to my volunteering to work on this project single-handedly.
- On my own with no additional resources
- Achievements:
- Negotiate licensing fees with the vendor and cost sharing with the 2 HP groups using the system.
- Procure hardware and make it available locally as needed (server and optical drive in Atlanta, scanners in Atlanta, Miami, London, Dublin, Toronto)
- Install the server in the datacenter and clients globally.
- Setup scanners and document indexing
- Train users in document scanning and indexing.
- Setup documents backfill centers globally.
- Support the system 24x7 with 0 down-time over the next 12 months.

EDUCATION

Bachelor of Arts | UNIVERSITY OF TORONTO, Toronto, Ontario

Computer Analysis Design and Programming | CDI COLLEGE, Mississauga, CA