

## Solution Architect - Banking

## Qualifications:

Banking Solution Architecture & Design	3 years
Telecom Solution Architecture & Design	10 years
Design Patterns, 4+1RUP, OOD, OOP, UML	10 years
Event Driven Architecture & Integration: Kafka	2 years
Mobile Frameworks & Integration: BackBase, Malauzai	
API Microservices Design & Integration	
Core Banking API Frameworks: Finxact, Savana, Finastra, BackBase	1 year
Portals: Insurance/ Banking/ Gaming/ Government/ Supply Chain/ Telecom/ E-Commerce	
Data Layer: RDMS, Entity/ Data Modeling, SparX EA/Erwin DB modeling	5 years
Master's Degree in Computer Science, Advanced Software Systems, Bilingual	
Solution Architect, Designing, Re-factoring & Performance Tuning Enterprise Apps	10 years

## Experience:

#### Technical Architecture Delivery Manager | ACCENTURE - Technology Architecture - Toronto, Mar 2021 - present

Accenture is a leading Global Professional Services company, providing a broad range of Services and Solutions in Strategy, Consulting, Digital, Technology & Operations. Accenture works at the intersection of Business & Technology to help clients improve their performance and create sustainable value for their stakeholders.

## Solution Architect - National Bank of Canada, Montreal, Mar 2022 - Aug 2022

- CCIA Infrared, CCIA SAFEID v2, UMA rewrite, CCIA Architecture RoadMap CCIA & Card Domain
- E2E Solution Architecture, Detailed Design & Interface specifications

## API Integration Architect - Silicon Valley Bank, San Jose, Oct 2021 - Dec 2021

- Architecture, E2E Solution, Detailed Design & Interface specifications HR Lexonis API Integration Project
- Microservices REST API Design, Event Driven, APIGEE, Async API & Kafka, REST APIs Integration

#### Functional Designer – CN, Montreal, Apr 2021 – Sep 2021

- Digital Mobile Kinvey API Integration, API Microservices Integration, Kafka Event Driven Integration
- · Solution Architecture, Functional Design Requirements & Blueprint, Detailed Design Solutioning

#### EBanking API Developer - CIBC | Simplii Financial, Toronto - Oct 2020 - Mar 2021

• Digital Mobile Banking API, Microservices API Integration, HL Solution Design & Detailed Design

## Integration Lead – Finastra CORE Banking - May 2020 – Oct 2020

• Digital Mobile Banking API & Integration, CORE Banking API & Integration, Malauzai Digital Integration Audit, Enhancements & RoadMap, Finastra CORE API Banking integration

#### Microservices Integration Developer – Finxact Core Banking, Feb 2020 – May 2020

• BackBase Mobile Banking API & Integration, Finxact CORE Banking API & Integration, Savana CRM API integration

# Technical Architecture Manager | ACCENTURE - Technology Banking - Toronto, Feb 2019 - Mar 2021 - permanent

## Solution Architect - TD Bank Business Banking - One Billing System, Feb 2019 - Oct 2019

TD OBS Deposits | One Billing System Phase 2 – OBS Strategic Billing

- Designed Transaction Processing & Billing Processing batch jobs Performance Tuning strategy
- Designed OBS Archiving & Purging Solution
- Designed Calendar OBS Batch Jobs & tasks, Designed Batch Processing strategy & Sequence
- Designed Autosys Enterprise Scheduler integration with OBS Batch Processing framework
- Designed EDPP Data Integration with OBS Staging schema
- Created OBS Target State System Architecture Diagram and mapped TD JIRA Epics & Stories to associated 4 Agile PODs
- Update all TD OBS Confluence Architecture diagrams related to Phase 2 OBS Deposits
- Creates and solution-ed all POD5 Technical Architecture stories; work with OBS Business Architect and TD Solution Architect to get closure on all Deposits Architecture stories
- Link all Architecture POD5 stories to Developments PODs stories
- Created Development PODs specification; clarified & presented each specific solution to assigned development teams
- Approved the low-level design to align with overall OBS System Architecture
- Sign off Architecture sessions to TD Bank OBS Stakeholders
- Assisted TD Solution Architect & validated GTAC & ARB OBS Phase 2 Architecture Presentation deck
- Refactored & Decomposed the Day 5 Billing Processing Job

#### Solution Architect - TD Bank - OBS-TIL EDPP Data Ingestion - Feb 2019 - Aug 2019

TD OBS-TIL EDPP Data Ingestion – Customer 360

HL estimates OBS-TIL, Project initiation, Project rollout decks, Presenting OBS-TIL Technical solution

- Designed OBS-TIL Data ingestion solution, designed integration with TD Autosys, Designed OBS-TIL Data Ingestion Oracle
  Export & Oracle Import triggering, processing & sync with OBS Batch jobs; Designed integration with EDDP Sqoop Import
  triggering and data extraction
- Various technical solution presentations with TD Business, TD EDPP and TD OBS teams; defined final Architectural solution
- Created & solutioned all POD5 Technical Architecture stories for OBS-TIL Data Ingestion; worked with Business Architect,
   EDPP Architect, OBS Solution Architect to get alignment & closure on all OBS-TIL Data Ingestion Architecture stories
- Linked all Architecture POD5 OBS-TIL Data Ingestion stories to all Data Ingestion Developments POD stories; documented solution for Development POD; clarified & presented the specific solution to TIL development team; approve development POD the low-level design to align to overall OBS and OBS-TIL architecture
- Created TD OBS-TIL Data Ingestion Confluence Architecture documentation & diagrams
- Created TD OBS-TIL Data Ingestion Operational & Failover procedures & documentation
- Extracted ER Data Model diagrams for all schemas and presented the ER Model to EDPP team
- Presented & Trained EDPP team on Jasper Designer ETL Tool
- OBS Data flows & integration presentation for EDPP & OBS teams

Senior Technical Architect	ZAFIN - Toronto, Mar 2017 – Feb 2019 - permanent
	Java7, JEE, JBoss, Spring, Hibernate, Eclipse, GWT, Oracle, SparX EA, Maven, JUnit, Liquibase,
	Git, Bitbucket, JIRA, Hazelcast, Dynatrace, SaaS, Cloud, API, OAuth, Confluence, Azure, Splunk

ZAFIN is a provider of Relationship Banking Software, a Global leader in Product & Pricing Technology Solutions for Banking Industry. miRevenue G4 Product is Zafin's flagship JEE product consisting of: Price & Product Management, Billing & Cash Management platform, Product Catalog, Offer Management, Customer Management & various other Banking products/components

- Managed & Coordinated ZAFIN's Delivery Architecture Practice, Technical Architecture standards and ZAFIN Delivery Best practices for G4 miRevenue Banking projects implementations
- Reviewed, refactored & provided performance / operational enhancements for the following G4 miRevenue implementations: Bank of The West, TD, CIBC, Barclays, CMIB, NedBank, BPI
- miRevenue G4 SaaS AZURE Cloud Solution Design for CIBC, TD

## Barclays - Strategic Billing - Retail Banking - Jun 2018 - Aug 2018

• Reviewed HW Infrastructure & configuration - number of batch nodes, Java Max heap per each batch node process, setup proper Batch cluster performance & infrastructure parameters settings - worker threads, work chunk size, DB commit size, provided integrated solution for batch jobs, DB performance tune strategy, refactoring various batch components

- Created EA UML diagrams: Infrastructure, Target Model Architecture, Data Flows Architecture
- Updated Architecture & Detailed Design Specification to reflect existing & new refactoring solutions
- Reviewed HL design, solution and provided Refactoring & Operational Enhancements actions

#### NedBank - Enterprise Billing Engine - Retail Banking - May 2018 - Jun 2018

- Created EA UML diagrams: Infrastructure, System Architecture, Data Flows Architecture
- Created NedBank Solution Architecture Document from segmented existing technical documentation
- Reviewed design and solution and provided Operational Enhancements actions

## BPI - Bank of Philippines Islands - Pricing and Billing - Retail Banking - May 2018 - Jun 2018

- Created UML diagrams: Infrastructure, System, Target Model Architecture, Data Flows Architecture
- Created the BPI Performance Testing strategy, including capacity and infrastructure assessment
- Reviewed design and solution and designed Operational Enhancements

## CMIB - Bank of Malaysia - Niaga - CISC Integration with miRevenue - Retail Banking - May 2018 - Jun 2018

- Reviewed design and solution and provided operational enhancements
- Review the system capacity and performance tuning parameters
- Created the Batch billing Performance tuning & testing strategy

## TD Bank - TD OBS Deposits (One Billing System Phase 2) – OBS Strategic Billing – Feb 2018 – Feb 2019

- Operational enhancements list for CORE and Implementation layer to be planned for TD Deposits
- Operational plan to allow parallel development for Deposits and TD CMS OBS Production fixes
- SAD Phase 2 Architectural solutions *UML System Context Diagram Phase 1 versus Phase 2, UML Application Context Diagram (as is Phase 1, to be Phase 2), UML Architecture Model Diagram*
- SCRUM Architectural Pod, together with TD Solution Designers, TD Solution Architect, TD application Architect and TD Technical Lead. I am responsible with overall SAD, end to end
- Participate in Scrum of Scrums and coordinating in between DEPOSITS SCRUM, TD Security SCRUM and rest of TD SCRUM teams - CIF SCRUM team (customer REST API integration stories), EDPP SCRUM team (Enterprise Data Warehouse stories), CIPS Scrum
- Solution to migrate Customer Link from Web services to JSON APIs, Integration with TD Federated server
- Interest Rate Engine Calculation solution for TD CIPS replacement; created HL Demo, Detailed assessment analysis
- Solution for Deposits Data model and TD EDPP to miRevenue staging integration
- Solution the SaaS Cloud Billing and Pricing strategy for TD OBS, created the Road Map, PPT Demo, Technical Diagrams for TD Cloud SaaS (Azure) migration
- Solution miRevenue as Single Billing Platform for Cash Management Systems, Deposits Accounts Systems, TD Securities, TD Mortgages, TD Credit Interest
- Various solutions & enhancements to support scalability: separate design to have LOB independent processing, Designed & solutioned separate Batch cluster MW to have separate LOB Batch Cluster in the same system processing independently

## TD Bank - TD PP - Precision Pricing Project - Retail Banking - Mar 2017 - May 2017

- Managed the technical/design/architecture/development aspects for Z5 RPE TD PP Precision Pricing. Project team: 2 Developers onsite, 3 CORE Developers, 2 BA onsite, 2 QA Testers onsite, 1 Business Architect
- Designed Precision Pricing project solution in 3 stages *UML use cases, Architectural diagrams, Component Design, Design miRevenue PP Integration solution, present Architecture ABP/SAD to TD ARB/ABS/Architects, TD PP Project stakeholders*
- Solution Design, HLD, Detailed Design, FRD/ ISD build
- Setup Oracle VM for Development and BA; setup ZRPE Cloud Development environment
- Coordinate with ZRPE CORE team to document exact interfaces to be available; define new interfaces roadmap

## CIBC - myClient - Pricing and Billing- Business Banking - Feb 2018 - Mar 2018

- Refactored & redesigned the Business Banking Pricing and Billing myClient, a refactoring in order to move the G4 miRevenue application to a Zafin Cloud infrastructure & apply significant Operational enhancements Batch Framework, Batch Scheduling, Batch Performance, Integration, Operational requirements, Console & UI Enhancements
- Created the new SAD extracted all the E/R Data Models per each application domain and all Java entity Class diagrams
   UML System Context Diagram, UML Application Context Diagram
  - Functional Components Diagram, miRevenue Application Components Diagram, Infrastructure Diagram
- Updated all architecture and design documents to be presented to the CIBC Architects & Developers
- Reviewed the CIBC projects SaaS Cloud strategy

## TD Bank – TD Cash Management Systems | One Billing System - CSM Phase 1 – May 2017 - Feb 2018

• Managed the technical/design/architecture/development for G4 miRevenue - TD One Billing System, Corporate Billing. Project team: 10 Developers onsite/20 Developers offshore, 3 BA onsite/3 BAs offshore, 5 QA Testers onsite/10 QA Testers offshore, 1 Business Architect, 1 G4 Product Architect offshore, 1 Technical Architect offshore, 1 Project Manager

- Created & Presented Architectural reviews documents, Architecture Road Maps, Project Updates, Solution Design review sessions, Enhancements Solution Presentations & Critical Project Enhancements Updates
- Designed, architected, refactored, configured & performance tuned the TD CMS OBS miRevenue system. After 7 months
  the project was back in green project status & deployed in Production Test Pilot. This allowed TD & ZAFIN the opportunity
  to extend to the Stage 2 Deposits, next Corporate LoB
- Component design, redesign/ refactoring:
  - TD Autosys Scheduler miRevenue integration
  - TD Autosys Scheduler i-Hub, miRevenue, miRevenue adjustments design jobs groups, setup groups dependencies, refine to 9 calendar day streams (miRevenue job groups per each calendar day)
  - miRevenue batch triggering redesign "all or nothing", redesign TD Autosys groups
  - TD Tivoli Enterprise Monitoring integration; setup miRevenue DB API integration and integration solution
  - BI Jasper Reporting to miRevenue integration, Jasper reporting decoupling/timeout solution
  - Properly redesigned the Integration control table between miRevenue and Jasper canned reports extraction
  - Day 5- "Billing run" Statement generation XML Redesign solution, EBX MFT File transfer solution
  - Enhanced the OBS DB i-Hub ETL Batch staging to miRevenue integration and control tables
  - Aligned the solution to load Hazelcast distributed catch for all miRevenue Batch tasks
  - Scanned & reviewed the entire source code and implementation level task for multithread synchronization issues; aligned incorrect implementation & correct various design level defects
  - Design miRevenue Archive & Purging strategy presented the strategy and aligned with TD requirements
  - Design the SSO integration miSite LDAP control setup, tune the SSO setup for miRevenue, configure SSO setup for Jasper Reporting
- Designed 20+ G4 miRevenue application operational enhancements UI Exception Management, Errors enrichment, Oracle Wallet integration, SSO LDAP integration, Jasper Real time launch enhancements
- Redesigned & refactored miRevenue Day 5 "Billing Run" Statements XML Generation job & tasks; redesign the granularity for Day 5 "Billing Run" jobs and tasks. Redesign the Day 0 Data Migration modules, redesign various batch job modules, performance enhancements redesign for Day 3 "Pricing Run"
- Implemented the Performance tuning strategy for entire miRevenue system

  Backend jobs/ task implementation code, apply distributed application cache to batch tasks, tune the JBoss parameters, tune
  the miRevenue performance tune parameters work chunk size, max worker threads, Hazelcast max threads, JBoss DB pools,
  Oracle DB sessions, Oracle DB RAM, performance tune the various core SQL queries to use "parallelize" multi core
  capability processing, setup gather schema/ tables statistics, review indexes etc.
- Analyzed/ solved DB deadlock & row lock conditions and setup strategies to avoid DB deadlock, coordinate with CORE team to promote CORE defect fixes, designed & coordinated with Implementation onsite/ offshore team to deliver the Sprint fixes, setup the scope and defects for all fixes, coordinate with TD stakeholders the update on the core/ implementation fixes
- Coordinated with TD Solution Architect to all major architectural related issues & fixes starting Sep 2017
- Setup Weekly Architectural team meeting with entire ZAFIN TD project team
- Documented the TD CMS miRevenue Operational Manual in Confluence; deliver to TD stakeholders
- Worked with Zafin HR to setup Delivery Technical Architect Interview guide; interviewed candidates for 2 Technical Architect positions- Aug-Sep-Oct 2017
- Worked with Software Engineering Manager & interviewed candidates for Senior Software Engineer May Jun 2017
- EA Architectural work repository for TD- Precision Pricing; created the Solution Architecture Document; presented the SAD for review with TD Solution Architect 10 EA UML diagrams
- 40 EA UML diagrams Architectural work repository for TD CMS One Billing System extracted and documented in HTML format and published in Confluence:
  - UML System Context/Application Context Diagram/ Conceptual Application Architecture Diagram
  - Functional Components Diagram, miRevenue Application Components Diagram, Infrastructure Diagram
  - UML Sequence Diagram for TD Autosys Scheduler design and jobs triggering
  - UML Sequence Diagram for miRevenue job staging "All or nothing"
  - UML Sequence Diagram for TD Tivoli Monitoring integration Scheduler Design and Jobs triggering
  - UML System Diagram for Day 5- Statement generation XML Redesign solution
  - UML Sequence tasks System for Day 5 Billing run- Statement generation XML Redesign solution
  - UML Infrastructure Diagram, UML DR Infrastructure Diagram
- Created 20 MICORE Core defects & tracked directly with miRevenue G4 Product Architect on exact solution; planned the CORE G4 build versus the incremental build releases
- Coordinated and presented to TD Architects: 3+ Architectural Sessions -Apr-May- Jun 4 Job Framework Architecture sessions Oct-Nov-Dec-Jan
- Created KT strategy; performed 4 Architecture KT sessions to TD Architects

# Bank of West – Ripley Zafin G3 miRevenue - Mar 2017 - Jun 2017

- Implemented a technical plan to allow 12 months old GL Report failure production issue generated by Transaction table 6 billion rows, growing 2 million transactions per day
- Coordinated the solution in 45 days with Zafin Delivery Director, Zafin Support PM, ZAFIN DBA, 2 Zafin Developers and 2 BOW DBAs, BOW PM, 2 BOW Developers

Education:	Master's Degree in Computer Science, Bucharest, Romania		
	Polytechnic University of Bucharest - Automation & Computers Faculty		
	Advanced Software Control and Automation Systems		
	<ul> <li>ZAFIN ZPlatform, Training</li> </ul>	Aug 2019	
	■ TD SCRUM Agile, Training	Mar 2018	
	<ul> <li>ZAFIN SCRUM Agile, Training</li> </ul>	Oct 2017	
	<ul> <li>ZAFIN miRevenue Pricing &amp; Billing, Training</li> </ul>	Nov 2017	
	<ul> <li>ZAFIN Retail Banking/ Business Banking, RPE Training</li> </ul>	Mar 2017	
Training & Certificates:	<ul> <li>CITRIX XENAPP Administration, Training</li> </ul>	Sep 2013	
	<ul> <li>HP BPM Business Process Monitoring, Training</li> </ul>	Sep 2012	
	<ul> <li>Oracle SOA Suite 11g, Training</li> </ul>	Mar 2012	
	<ul> <li>SparX Enterprise Architect, Training</li> </ul>	Mar 2011	
	■ HP HPD Diagnostic, Training	Apr 2011	
	<ul> <li>Sun Certified Web Developer for J2EE – 310-080</li> </ul>	Oct 2004	
	■ Sun Certified Programmer Java 2 Platform 1.4 – 310-065	Aug 2004	
	<ul> <li>Sun Certified - IForce Partner</li> </ul>	Feb 2004	
	<ul> <li>Oracle SOA Suite 11g: Build Composite Application Certificate</li> </ul>	Mar 2011	
	<ul> <li>BEA WebLogic ALSB, WLS Training</li> </ul>	Jan 2009	
	<ul> <li>Embarcadero Conference</li> </ul>	Feb 2008	
	■ BEA WLI Training	Nov 2007	
	■ BEA WebLogic Workshop 8.1, Dev2Dev Conference, Toronto	Oct 2003	
	<ul> <li>DWL Customer 3.0 Training, DWL Inc., Toronto</li> </ul>	Jan 2003	
	<ul> <li>DWL Unifi 4.0 Training, DWL Inc., Toronto</li> </ul>	Apr 2002	
	<ul> <li>WSAD 4.02 Training, DWL Inc., Toronto</li> </ul>	Apr 2002	
	<ul> <li>BEA WebLogic Workshop 6.1, Dev2Dev Conference, Toronto</li> </ul>	Apr 2002	
	<ul> <li>Professional Comp. Eng. Certificate – York Univ., Toronto</li> </ul>	Aug 2001	
	Adv. Java Programming (J2EE) – PRO 408SA		
	Enterprise Java Beans (EJB) – PRO 512SQ		
	Advanced Oracle PL/ SQL – Oracle Database Programming		
	Adv. Java J2EE / E-Com., Canadian Inst. for IT, Toronto	Jul 2000	
Awards:	■ Rogers Communications - Customer 1st Award 2012		
	<ul> <li>Rogers Communications - Customer 1<sup>st</sup> Award 2014</li> </ul>		
	Rogers Communications - Business Award - Fall 2014		