Sveinbjörn Geirsson

Software Developer

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₩ April 1986

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🕜 Raudbjorn



Public PGP Key



Мe

Software engineer with a decade of experience in the payment card industry, focusing on reliability, security, and speed. Passionate about continuous delivery, infrastructure automation, and functional programming, especially in languages where the compiler can be leveraged for robust code validation and optimization.

Professional Experience

Reiknistofa Lífeyrissjóða

2023 - 2025

Software Engineer

- Developed and maintained software systems serving pension funds, handling everything from mortgages, securities, and their regulatory communications, to managing fund members' disability and retirement benefits.
- Managed the setup and maintenance of X-Road security server; a secure communication layer providing programming interfaces for government services.
- A major part of responsibilities involved reporting to the Central Bank of Iceland; including obligations registry containing status of all mortgage lending.

Rapyd Financial Services

2013 - 2022

Software Engineer

Payment Processing & Settlement

- Designed and developed a sophisticated settlement engine to calculate merchant fees, rolling reserves, and refunds, incorporating complex clearing logic.
- Developed a flexible payment orchestration system to manage domestic and international transfers with intelligent batching.
- Integrated loyalty program balance systems with real-time reconciliation capabilities.

Financial Systems Integration

- Designed robust Visa/MC reconciliation pipeline with advanced data normalization for seamless ledger integration.
- Implemented sophisticated multi-currency cost/value date calculation system for diverse financial instruments.
- Developed comprehensive chargeback and dispute cost management framework.

Reporting & Risk Management

- Built real-time reporting infrastructure for payment facilitators with automated volume and balance tracking.
- Engineered fraud detection and chargeback resolution systems with advanced reporting capabilities.
- Created optimized database views enabling cross-system integration with minimal domain knowledge requirements.

Core Infrastructure Services

- Implemented real-time FX rate processing system integrating rates from Visa, Mastercard, and central banks.
- Developed intelligent transaction categorization system for product offerings and geographical boundaries.
- Built automated systems for processing complex financial data streams including chargebacks and interchange.

Technical Skills

• Enterprise Legacy

Genero 4GL, IBM Informix, IBM DB2, X-Road Server

• Identity Auth
OAuth2/OIDC,
Custom IDP,
Matrix Auth,
SMTP/IMAP

• Data Processing
Apache Spark,
Hadoop,
ETL Pipelines,
Pandas,

XPath/XSLT

Network Security

DNS (Bind9, CoreDNS), VPN Solutions, Federation (Matrix), TURN/WebRTC

• Cloud Infrastructure
Google Cloud Platform,
Amazon Web Services,
Docker, Podman,
Rancher, Helm,

Terraform
• Databases

SQL-93, OLAP Systems MariaDB, MySQL, Redis, XML/JSON • Programming Languages

Java, Python, Rust, Go, JavaScript/TypeScript, Scala

• Tools & Automation Ansible, Git,

> CI/CD Pipelines, Monitoring Systems

> > 2019

Notable Projects

• Knapsack Optimizer Service

Technical Assessment

A sophisticated optimization service implementing solutions for the NP-hard Knapsack Problem. Features include RESTful API design, Docker containerization, async processing, and intelligent caching strategies for improved performance.

• Raudbjorn/knapsack-optimizer-service



• ipChecker 2020

Distinguishes domestic network traffic

An innovative PHP implementation for identifying Icelandic IP addresses using DNS queries, following RIX (Reykjavík Internet Exchange) methodology. Notable for eliminating dependencies on third-party geolocation databases while maintaining high accuracy.

Raudbjorn/ipChecker



• missing.cat 2021

My cat went missing, and amazingly this TLD was available

A full-stack web application initially developed for a time-sensitive personal cause, demonstrating the integration of multiple modern web technologies:

- Ghost CMS for content management and publishing.
- Google Workspace API integration for communication services.
- Facebook Messenger integration via Causes API.

 $oldsymbol{\mathscr{O}}$ missing.cat



• Leiguvaktin.is 2014

Supply and demand analysis for the Reykjavik rental market

A real-time rental market aggregator for Reykjavik, featuring automated data collection from multiple sources, data normalization, and a user-friendly interface for market analysis.

♠ Raudbjorn/leiguvaktin



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Certifications



2023 coursera Usable Security



2015



2018 coursera Cryptography

2015

coursera Functional Programming in Scala



2016 **coursera** Software Security



2014

References

Tómas Árni Jónsson

Software Specialist @ Deloitte

Partnered on RL's core integration with Central Bank of Iceland's Data Portal, 2023–2024

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Þráinn Guðbjörnsson

Chief Risk Officer @ Festa Pension Fund

Collaborated on Korta's earliest system as the company's 2nd and 3rd developers, 2013–2017

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