

# Ariel Paulin

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## Technical Skills

**Languages:** Scala | Java | Python | SQL | JavaScript | C# | C++ | C | Assembly (ARM)

**Technologies:** Akka | Spark | Kafka | Flink | Play Framework | Spring Boot | React | Node.js

**Developer Tools:** Git | IntelliJ | Eclipse | AWS | Azure | Docker | Jenkins

## Experience

### Senior Software Developer

*CNH Industrial*

Mar 2023 – Present

Toronto, Ontario (Remote)

- Developed and improved real-time data pipelines processing 2 billion+ telemetry records daily
- Optimized batch jobs and enhanced analytics workflows using Databricks notebooks
- Built APIs to expose enriched data and functionality to downstream consumers
- Engineered robust data processing solutions using Scala, Spark, Flink, and Azure
- Maintained production systems during on-call rotations, ensuring stability and timely issue resolution
- Enhanced observability by adding Prometheus metrics and dashboards across key services
- Extended backend services with new features and functionality using Java and Spring Boot

### Senior Software Developer

*DataPassports*

Jul 2020 – Dec 2022

Toronto, Ontario (Remote)

- Enhanced a Scala-based Spark application with a cross-functional team, improving performance and scalability
- Implemented a multi-stage pipeline with data models and TensorFlow on SQL tables for entity recognition
- Optimized API workflows with Kafka and Spark Streaming, achieving 20x better processing performance
- Developed token-based authentication for Azure SQL using Azure Active Directory to improve security
- Worked with senior leadership to design and deliver new feature sets aligned with client needs

### Scala Developer

*AwareAds*

Jun 2019 – Jul 2020

Toronto, Ontario

- Acted as the lead Scala developer of the Real-Time Bidding Platform (RTB)
- Conducted engineering analysis of all services and compiled a formal report in L<sup>A</sup>T<sub>E</sub>X
- Redesigned and implemented all backend microservices using the Play Framework
- Built an AdExchange simulator for stress testing infrastructure and simulating the RTB environment
- Engaged directly with stakeholders to define requirements and deliver custom solutions

### Play Developer

*Publicis Sapient*

Oct 2018 – Apr 2019

Toronto, Ontario

- Engineered features for Walmart.ca's checkout flow using Play Framework to enhance user experience
- Collaborated with a cross-functional team to integrate third-party services, ensuring seamless functionality
- Deployed and maintained services using Jenkins and Walmart internal tools, ensuring reliability

### Software Developer

*AppDirect*

Jan 2017 – Apr 2017 | Sep 2017 – Dec 2017

Montréal, Québec

- Designed and implemented a Scala microservice to communicate with external APIs
- Built scalable, fault-tolerant functionality using Akka, Akka-HTTP, Scalaz, and Play Framework
- Integrated a Redis instance for efficient storage of temporary user data and asynchronous workflows
- Optimized the internal ticketing system UI using React, Redux, and Axios, improving usability and productivity

## Education

### University of Waterloo

*BASc. Computer Engineering*

Waterloo, Ontario

Sep 2013 – Apr 2018