

# Ariel Paulin

## COMPUTER ENGINEERING

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### Summary

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- Experience with Scala, Java, Python, JavaScript (React & Redux), HTML, CSS, C#, C++, C, SQL, VHDL and Assembly
- Proficient in project tracking, version control and continuous integration technologies (e.g., JIRA, Git, TeamCity)
- Software development lifecycle experience (i.e., Agile, Kanban) with both large and small development teams
- Development experience on Linux, Windows and Mac OS environments

### Experience

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#### Senior Software Developer | DataPassports

Toronto, Ontario (Remote)

TRUST SERVICES

July, 2020 - Current

- Worked alongside team of 5-7 developers, 3-5 QA and 2-3 DevOps personnel on a Scala based Spark application
- Designed and built new feature to run multi-stage pipeline of data models and TensorFlow models against SQL tables for entity recognition
- Implemented new API workflow with Kafka & Spark Streaming to achieve 20x improvement in performance
- Developed new feature to allow token based authentication with Azure SQL using Azure Active Directory
- Worked with senior leadership to develop and implement new feature sets based on client needs
- Modified and created new suites of tests using ScalaTest

#### Scala Developer | AwareAds

Toronto, Ontario

BIDEXO PROJECT

Jun. 2019 - July, 2020

- Acting lead Scala developer of Real-Time Bidding Platform (RTB)
- Conducted engineering analysis of all services and compiled formal report in  $\LaTeX$
- Redesigned and implemented all backend microservices using the Play Framework
- Built AdExchange simulator for stress testing infrastructure and simulating RTB environment
- Created new suites of tests using ScalaTest and various scripts for data transformation

#### (Contractor) Play Developer | Publicis Sapient

Toronto, Ontario

CHECKOUT TEAM

Oct. 2018 - Apr. 2019

- Worked with team of 5-7 developers on checkout flow of Walmart.ca
- Created new end-user functionality via Play Framework (Scala)
- Developed new features with other third party vendors
- Deployed service into environments using Jenkins, OneOps and Walmart internal integration tools
- Created new suite of tests using ScalaTest and assisted in the refactoring of existing automated tests

#### Software Developer | AppDirect

Montréal, Québec

PLATFORM TEAM - APPHELP

Jan. 2017 - Apr. 2017

Sept. 2017 - Dec. 2017

- Developed new Scala based microservice to handle communication with an external API
- Built all functionality using Akka, Akka-HTTP, Scalaz and Play Framework
- Integrated a Redis instance to store both temporary user data and asynchronous data
- Deployed service into production incorporating ScalaTest suite and SaltStack using TeamCity
- Developed UI for internal ticketing system using React, Redux & Axios
- Created new suite of tests using Jest & Enzyme

## Software Engineering | Sears Holdings Corp.

CART & CHECKOUT TEAM

Hoffman Estates, Illinois

May. 2016 - Aug. 2016

- Worked with senior staff to design and architect a project tracking and management tool
- Spearheaded development of a web application using ReactJS and Node.JS
- Integrated Bootstrap, Reflux and Express into an ongoing project

## Software Designer | Nokia

SAM NSP TEAM

Ottawa, Ontario

Aug. 2015 - Dec. 2015

- Designed and built server-side functionality for a piece of enterprise software
- Implemented new features using Spring Framework, Jersey Framework and Apache Commons
- Wrote all logic relating to importing, parsing, manipulating and exporting application data
- Developed comprehensive list of JUnit tests to ensure product functionality

## Software Developer | IBM Canada

RIVERSIDE SOFTWARE LAB (COGNOS TM1)

Ottawa, Ontario

Jan. 2015 - Apr. 2015

- Collaborated with team of 20-25 developers on enterprise software (i.e. Cognos TM1 Analytics)
- Implemented new functionality using HTML, CSS and JQuery for beta release
- Developed suite of automated tests that were deployed by integrating Jenkins and Selenium
- Assisted in the discovery and remediation of software bugs

## Technical Systems Integrator | Bell Canada

IP INNOVATIONS LAB

Toronto, Ontario

May. 2014 - Aug. 2014

- Performed data analysis and conducted laboratory experiments
- Worked closely with senior team members, technology subject matter experts, network operations, and vendors to develop new services
- Certified new carrier grade router and infrastructure for various TCP/IP protocols (e.g., IS-IS, OSPF, MPLS, BFD, BGP, Multicast)

## Projects

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### C Based OS Programming

- UNIX based multiprocess and multithreaded programs using common design practices (e.g., IPC, Semaphores, Mutexes)

### Embedded C Programming

- Firmware level software on Altera DE2 FPGA board which made use of LCD, Line Out and SD Card Reader

### Assembly Software Design (ARM)

- Morse code converter and reaction timer using 32-bit ARM Cortex-M3 microcontroller

### Eye Tracking Analytics Software

- Web frontend in React for aggregating and viewing data from mobile eye tracking software

## Education

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### University of Waterloo

BASC. COMPUTER ENGINEERING

Waterloo, Ontario

Sept. 2013 - Apr. 2018