

RUNZHUO LI

RUNZHUO1990@GMAIL.COM | (647) 834-6210 | WWW.RUNZHUOLI.ME

SENIOR SOFTWARE ENGINEER

- **Senior software engineer** with 5 years of software development experience as well as proven accomplishments in star-ups and public companies
- **Lead developer** who modernized legacy system components that had operated for 10+ years in banking industry and delivered software products used by 3,000+ physicians in healthcare industry
- **Oracle certified professional Java programmer** who excels at object-oriented programming and multi-layer system design

TECHNOLOGY SUMMARY

Languages: Java (Spring, Hibernate, Maven), SQL, Typescript, HTML, CSS, Markdown

Databases: PostgreSQL, Oracle, H2, AWS Dynamodb

Infrastructures & Platforms: AWS (Lambda, S3, Alexa Skills), GCP (Kubernetes, Load Balancer)

Development Tools, Methodologies & Environments: Object-Oriented Analysis & Design, Design Pattern, Data structure & Algorithm, Requirements Analysis, Git, CI/CD

Operation Systems: Linux, Mac OS X

PROFESSIONAL EXPERIENCE

Senior Associate, Software Engineer
Capital One, Toronto, ON

09/2018 to Present

- Modernizing Canada Secured Card Tracking System from a batch system to an event-driven microservices system. In the new distributed system, incoming requests are received through API or Kafka stream, parsed & delivered to a S3 bucket, and processed by AWS Lambda functions.
- Developed and tested a new Restful task scheduler system from end to end, aiming to use a cost-effective solution to replace the existing vendor product. The in-house system supports the management of real-time workflow, task dependencies and holiday scheduling. (Springboot, Hibernate, Junit, PostgreSQL, Flyway)
- Configured CI/CD pipelines for 5 projects and reviewed team members' code to guarantee high code quality and sufficient test coverage. (Jenkins, CheckStyle, Jacoco, Sonar)
- Gave public presentations on Java functional programming, design pattern and Git at "Software as Craft" community in Capital One Canada.

Web Developer
The Home Depot, Toronto, ON

01/2018 to 08/2018

- Improved existing search algorithms and created customized Solr plugins for search queries related to product dimensions. It improved the precision of products search by 0.2% at Homedepot.ca.
- Reconfigured Solr index settings by analyzing segments merge algorithms in Solr which lowered server memory usage and daily manual operation costs.
- Provided viable solutions in Super SKU project and realized the design of grouping products by SKU in search results. (Apache Solr, SAP Hybris)
- Delivered a project of migrating Hybirs commercial search to adaptive search in a tight timeline.

Senior Developer Analyst	04/2016 to 12/2017
Programmer Analyst II	04/2015 to 04/2016
Telus Health, Toronto, ON	
<ul style="list-style-type: none"> Provided software design, integration, testing, deployment and maintenance services in a client-faced environment at eCHN (electronic Child Health Network). Translated business requirements, spearheaded development works and executed production releases for eCHN portal (hinet.echn.ca). Replaced eCHN user management legacy components with a real time interactive web application, which reduced user creation time from 40 to 5 minutes. (J2EE, JSF) Initiated a modernized business intelligence solution to redefine eCHN stats and reporting procedures. Realized interactive visualizations of user behaviors and presented results to the CEO of Hospital of Sick Kids. (Power BI, DB2 MQT, Kimball Methodology) 	
Software Developer	10/2014 to 04/2015
Nightingale Informatix, Toronto, ON	
<ul style="list-style-type: none"> Developed encounter functions in Nightingale EHR system based on GWT framework. Devised data structure and algorithm for encounter notes roll back, versioning and deletion. 	
Research Assistant	01/2014 to 04/2014
University of Ottawa, Ottawa, ON	
<ul style="list-style-type: none"> Assisted with O-MaSE research (www.mobiledss.uottawa.ca) and developed a multi-agent decision support system to facilitate collaboration among interdisciplinary healthcare team members. Delivered a multi-agent prototype system and integrated the system with OpenMRS in 4 months. Performed a system demonstration at Elizabeth Bruyere Hospital and IBM Canada with excellent feedback. (JADE, WADE, Hibernate, MySQL) 	
Junior Java Developer (Co-op)	09/2013 to 01/2014
Canadian Internet Registration Authority, Ottawa, ON	
Software Programmer (Co-op)	05/2013 to 09/2013
StoneShare Inc., Ottawa, ON	
Software Engineer (Intern)	07/2011 to 10/2011
Alibaba Group, Hangzhou, Zhejiang	

EDUCATION

MS in Computer Science (Co-op) / UNIVERSITY OF OTTAWA, Ottawa, CA

BS in Computer Science / SOUTH CHINA UNIVERSITY OF TECHNOLOGY, Guangzhou, CN

Certification

OCP / Oracle Certified Professional, Java SE 8 Programmer

SIDE PROJECTS

Amazon Alexa Skills	12/2018 to Present
<ul style="list-style-type: none"> Developed and released 2 Alexa Skills - "Programmer Almanac" and "A precious Day". Assisted in developing and deploying the same applications on Google Actions. (AWS Lambda, GAE, Circle CI) 	
Apointer.ca	03/2018 to 11/2018
<ul style="list-style-type: none"> Built an appointment booking web application from scratch based on microservices architecture. The application is for customers to search for nearby stores and book appointments; and for business owners to manage store contents, employee shifts and requested appointments. Configured CI/CD pipelines to implement auto deployment on GKE. (Spring Cloud, Angular, Elastic Search, PostgreSQL, Kubernetes, Container Registry) 	