# **Mohan Narayanaswamy**

#### SOFTWARE ENGINEER

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#### Summary \_

- Experience with Java, JavaScript (and React), Go, Scala, HTML, CSS, SQL
- Strong advocate of Functional Programming, Properties Based Test Framework
- Built cloud applications using Spring-Boot, Cassandra, ElasticSearch, Lucene and Kubernetes
- Proficient in version control, continuous integration and scripting (e.g., Git, Maven, shell)
- Core infrastrcuture development experience High availability investment banking cloud applications

#### **Certifications**

- CKAD: Certified Kubernetes Application Developer The Linux Foundation
- Apache Cassandra 3 Administrator Associate Certification DataStax
- Spring Professional Pivtoal Software, Inc
- Functional Programming Principles in Scala ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE
- Principles of Reactive Programming (using Scala) ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE
- CS190.1x: Scalable Machine Learning-Apache Spark The University of California, Berkeley through edX

#### **Experience** \_

#### Principal Software Engineer | Margin and Collateral APAC | Vice President

JP Morgan | Singapore

Dec. 2018 - Current

MACS-CIB

- Built margin calculation investigation portal with ticket matching and un-strctured data reconciliation (using DAG).
- Built SRE tool for Cassandra database and log-analyzer to prevent recurring production issues.
- Enriched multiple applications (using ELK/Grafana/Jaeger) with technology stack of Spring Boot, React, Elastic-Search and Apache Cassandra.
- Manage APAC Collateral Management System development team located in Singapore.

## APAC Principal Software Engineer | Scala Developer | Semantic Data Model | Vice President

Bank of America | Singapore

REFERENCE DATA-GMOT

EDATA-GMOT Jul. 2014 - Dec. 2018

- Built Business process workflow for Japanese fund on-boarding applications.
- Manage requirements, features, build POC, delivering end-to-end solution.
- Built parser for bpm workflow DSL using PEG.js and natural language processor to deduce duplicate entities using Apache Lucene.
- Developed Spark rules on Cloudera Hadoop distribution for Data Quality Checks.
- Automated testing for Petri-Nets based workflow engine using HSQLDB as InMemory data-store.

#### Java Developer | InMemory Data Grid

ANZ|Singapore

LUXOR DEVELOPER-GMOT

Sep. 2012 - Jul. 2014

- Built TradeRepository for OTC trades supports Rates, FX, and Commodities using Gemfire NoSQL InMemory Data Grid.
- Monte-Carlo simulation engine accesses data using 1000 core HPC grid.
- Developed an automated testing framework to replay 1000s of combinations of OTC Trade lifecycle.
- Built reconciliation for backward binary compatibility and regression-testing.

#### Risk Software Engineer | Mu/Haskell Quant Tools

Standard Chartered Bank|Singapore

SABRE IntraDay Risk Platform

May. 2011 - Sep. 2012

- Developed End-of-Day reconciliation system for MUREX flow trades using embedded database.
- Server side javascript development, stream MXML as Trade Data Repository objects.
- Mu-Script/Haskell development that calculates risk for Interest rate product.
- Developed JUnit tests for Rates and FX derivatives pricing engine.

#### Investment-Bank Developer | Java/Spring Framework

Credit Suisse|Singapore

SOFTWARE ENGINEER

- Apr. 2007 May. 2011
- Built many applications using Java and Spring Framework.
  Acted as APAC Java Application Platform Architect.
- Built code analyzing graph tool to find duplicate components.
- Lead a team of java developers to build applications for Private Bank.

#### **Investment-Bank Developer | Java/Spring Framework**

Standard Chartered Bank|India

SOFTWARE ENGINEER

Dec. 2004 - Apr. 2007

• Built applications using Java and Struts Framework.

#### Developer | Java/Visual-Basic

Aspire Systems India

SENIOR SOFTWARE ENGINEER

Oct. 2002 - Dec. 2004

#### Developer | Visual-Basic

Bharatplant Consulting Ltd India

SOFTWARE ENGINEER

Feb. 2000 - Oct. 2002

### Personal Projects and Certifications \_

#### DailyPractice.info

- Creating learning habits, specially `Mathematics` for kids in remote villeges of India
- Organzing volunteer meetups, sponsoring `Mathematics` competition, bringing awarness about education to parents who are farmers or economically challenged.

#### Education

#### **University of Madras**

Chennai, Tamil Nadu

MASTER OF COMPUTER APPLICATIONS

Jan. 1999 - Dec. 2001

#### **University of Madras**

Chennai, Tamil Nadu

BACHELOR OF SCIENCE [MATHS]

Jun. 1994 - Oct. 1997