

# Mahidhar NANDIGAM

Software Engineer | Developer/Enthusiast Java/JEE

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Java Developer with 8+ years with passion for new technologies in general. Adept at solving complex problems with innovative, out-the-box thinking. Pursuing opportunities that challenge and provide avenues to learn new technologies. <custom edit for each job>

## SKILLS

Languages	Java 8, Angular 6, Groovy, Python.
Frameworks	Spring, Spring Boot, Spring Data, JPA/Hibernate, JUnit, REST Assured.
Databases	SQL, MongoDB, GraphDB, Liquidbase.
Services	Apache Kafka, Splunk, SonarQube, Dyanatrace
Developer Tools	Swagger Docs, IntelliJ Idea, git, vim.
Cloud Tools	PCF, Azure, Localstack (Local AWS).
DevOps Tools	Docker, Jenkins, Kubernetes, Nexus, Maven, Gradle, Contract Testing
Software Life Cycle	Agile/Kanban, Paired programming

## PROFESSIONAL EXPERIENCES

Current Jan 2018	<b>Ford Motor Company   Full Stack Developer, DEARBORN, MI</b> <ul style="list-style-type: none"><li>• Developing software delivery mechanism for OTA (over the air) updates for vehicles.</li><li>• Constantly involving in architectural re-design due to growth and new features.</li><li>• Created <b>4</b> out of <b>6</b> well tested micro-services, using spring initializr.</li><li>• Applied <b>TDD</b> approach from the beginning and achieved a code coverage of <b>95%-91%</b> for all micro-services.</li><li>• First in department to use queues (<b>Service bus, Kafka</b>), as a consumer and producer using only spring libraries; thereby keeping implementation agnostic.</li><li>• Used streaming solutions for large file upload/download as part of request. To keep application running out of memory, and never to have memory leaks as well.</li><li>• Paired across teams to build Angular based UI, that servers as a AppStore-esque web-based application.</li><li>• Scripted <b>Jenkins</b> pipeline to include release as stage that publishes to private nexus repo.</li><li>• Mentored <b>3</b> developers on the team at various level of the project.</li></ul> <div>Liquidbase Spring 2.0 TDD (CI) Git (CD) Jenkins Nexus PCF MS-SQL (Azure) Angular 6</div>
Dec 2017 May 2017	<b>Ford Motor Company   Software Engineer, DEARBORN, MI</b> <ul style="list-style-type: none"><li>• Brought up new backend micro-services that help create profiles for electric vehicle's charge stations based on location.</li><li>• Created Integrated and Functional Test suite for feature traceability and valued added user stories.</li><li>• Integrated with third part APIs to get location information, that is in turn used in creating user profiles.</li><li>• Designed a three layer data model to have complete de-coupling, and achieve abstraction for development.</li></ul> <div>Spring Boot Gradle Lombok Mapstruct BDD Gherkin PCF Mongo Db</div>
April 2017 September 2014	<b>Cerner   Java Developer, KANSAS CITY, MO</b> <ul style="list-style-type: none"><li>• Added new features for scalable applications that register and schedule patient visits across various hospitals/clinics in USA.</li><li>• Worked on SOA based application for patient data management. Implemented services to meet compliance by HIPAA.</li><li>• Implemented persistence layer using Hibernate to retrieve and store data from tables in Oracle.</li><li>• Migrated <b>1000+</b> of lines of code (about 20%) to use spring from Java 6.</li><li>• Developed Python scripts for automating tests based on given test plans, these scripts would read i/p and run them against tests and dump o/p in target folder.</li></ul> <div>JPA Hibernate Spring Data Maven Python SVN</div>

March 2014  
April 2013

## Qualcomm Semiconductors | CPU Verification Engineer, RALEIGH, NC

- Architecture verification of the CPU of the then next-gen Qualcomm's ARMv8 and ARMv7 compliant processor.
- Developed tests to verify ICACHE commands in ARM architecture.
- Provided solutions to bridge OVM/UVM (different verification methodologies) based test suite with DV (design verification) team's test bench.
- Created new OVM/UVM based components new design to ensure functional coverage.
- Wrote functional verification tests for 64-bit ARM based processor based on specifications.

Java Matlab VHDL Verilog Perl Cadence

## LANGUAGES

Java	●	●	●	●	○
Spring	●	●	●	●	○
Angular	●	●	●	○	○
Groovy	●	●	●	○	○
SQL	●	●	●	○	○
Python	●	●	●	○	○
Cypher (Neo4j)	●	●	○	○	○

## EDUCATION

2012	Completed coursework in Ph.D(Cryptography) from the George Mason University (Computer Engineering)
2010	Master of Science from the Old Dominion University (Computer Engineering)
2006	Bachelor of Science, Computer Science, Sir CRR College of Engineering, Andhra University, India

## PROJETS/PUBLICATIONS

### PREDICTING STOCK PRICE

2018 - WIP

[github.com/mnandig/quantamized-investing](https://github.com/mnandig/quantamized-investing)

This project is purely educational and is meant to give hands on experience into the world of data analysis.

Python Machine Learning Artificial Neural Networking

### DATA MANAGEMENT WITH GRAPHDB

2018 - CURRNET

[github.com/mnandig/master-data-management](https://github.com/mnandig/master-data-management) [graph-example](#)

Master Data Management is application that provides with holistic view of data using GraphDB's. Master data should unify customer, product and supplier data either in a single repo or distributed repository. Neo4j's implementation is tested with a TDD approach.

Neo4j Spring Data

### OPTIMAL DESIGN OF AN OFFSHORE WIND FARM LAYOUT

2008

[Document Id on IEEE : 4581308](#)

Simulated cost benefit analysis of large scale production of HVAC and structural modeling of off the shore wind farms with substantial results.

Published in 2008 International Symposium on Power Electronics, Electrical Drives, Automation and Motion.

Cited in 17 papers till date.

Genetic Algorithm Matlab Perl/Python Java

## REFERENCES

### Joshua Kuestersteffen

Software Engineer, CERNER CORPORATION



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