**NAVDEEP SINGH**

**EXPERIENCE SUMMARY**

* 15+ years of experience in professional software design and development using Java, JavaScript, Python on Windows and UNIX (Linux, Mac OS) platforms with Oracle, MySQL and PostgreSQL databases.
* Expert level hands-on with AWS, Azure, GCP, Docker Containers, microservices, Kubernetes and helm
* Vast experience with Web frontend, backend APIs in Java/ Node.js/Python, Microservices, Apache Kafka.
* Expert hands-on knowledge in Security standards OAuth2/OIDC, OKTA, best practices, OWASP top 10.

* Well versed in Responsive Web Design - HTML5, CSS3, JavaScript, Angular, React.js, QA Automation
* 3+ years of experience with native Android SDK and iOS with published mobile apps on the App Stores.
* AI Development with Hands-on in Python, LLMs, OpenAI API and Ollama.
* Full SDLC experience with modern Agile (Scrum) development methodologies.
* Domain knowledge in P&C Insurance, Wealth Management, Financial, Automotive, Health Care, Government.
* Engineering Graduate from prestigious Indian Institute of Technology (IIT), excellent problem-solving skills.
* 5 years of experience in Government IT Projects, including 3 years with Ontario Public Service (OPS).
* Continually self-trains to build cutting-edge skills.

**Project Details**

**Project #1: Lead Full Stack Engineer at Warner Brothers Discovery** (Apr’ 22 – Jun, 25)

Environment: Java 8, Nodejs, AWS, SpringBoot, Microservices, Redis, PostgreSQL, OAuth2.0, OKTA SSO, Docker, K8S, OpenAI API LLM integrations

Description: Working in an agile environment, helping create a suite of microservices enabling delivery of great consumer content to a myriad of platforms.

My Role/Achievements:

○ Implementation lead on DSuite applications for content creation, distribution and discovery.

○ Implement SSO in microservices and gateway using OAuth2.0/OIDC based Okta.

○ Setup DevOps for Github CI-CD pipelines, Gitops, using Helm and Istio (A/B testing).

○ Handle deployments on AWS utilizing EKS, CloudFront and S3 (Content delivery).

**Project #2: Senior Software Developer at Ministry of Transportation (MTO)** (Oct’ 21 – Mar’ 22)

Environment: Java 8, Javascript, Spring Data JPA, JPQL queries, Microservices, MongoDB, Docker, Kubernetes, Azure AKS, Azure DevOps, OAuth2.0, JWT, OKTA

Description: Working in an agile environment, helped build a modern cloud application for Permit Applications near the provincial 400 series highways.

My Role/Achievements:

○ Senior Developer worked with modern cloud microservice architecture..

○ Setup DevOps for CI-CD pipelines, support QA testing.

○ Integrations with utilizing REST, JSON serialization, Base64 encoding and XML web-services environments.

○ Implement traceability to aid in troubleshooting with microservices architecture.

**Project #3: Full Stack Engineer / Cloud Architect at Omers** (Jan’ 20 – Sept’ 21)

Environment: JavaScript, Java 8, GCP, SpringBoot, ReactJS, Microservices, Kafka, PostgreSQL, OAuth2.0, OKTA

Description: Working in an agile environment, helping to modernize legacy application to microservices model (SOA) using Kafka event sourcing and cloud-migrate aging legacy applications.

My Role/Achievements:

○ Solution Architecture, Lead Developer for public systems - MyOmers.

○ Migrate user base from Oracle Access Management to OAuth2.0/OIDC based Okta.

○ Setup DevOps for CI-CD pipelines, Gitops, using Helm and Istio (A/B testing).

○ Integrations with Salesforce, Contentful CMS and backend REST JSON and XML web-services environments.

○ SSO with OAuth2.0/OIDC using Okta and Keycloak for modern microservices.

**Project #4: Full Stack Solutions Developer at Conversation Health (AI Startup)** (Jan’ 19 – Dec’ 19)

Environment: JavaScript (React, Svelte), Node.js, AWS, Google Cloud, DialogFlow, RASA NLU, python3/Flask, Docker, K8S, Terraform, JSON, XML, SOAP web-services, OKTA, OAuth2.0

Description: Working in an agile environment, helping build a conversational product experience for the HealthCare Industry targeting Pharma, Health Care Professionals and patients. An example is at [https://askmerck.ca](https://askmerck.ca/)

My Role/Achievements:

○ Solution Architecture, Development Lead for the SASS product.

○ Integrations into client’s Salesforce environments other REST JSON and XML web-services environments.

○ Terraform scripts for client’s cloud environments, AWS, GCP, Azure. Implement OKTA for IAM.

○ Train NLU machine learning models.

○ CI/CD using bitbucket pipelines, Docker, K8S, Terraform on GCP.

○ Create JEST tests, cypress UI test automation.

**Project #5: Full Stack Developer at Capco (BMO, Co-operators clients)** (Apr ’16 – Dec’ 18)

**Environment**: Java 8/SpringBoot, JavaScript/Angular 6/JSON, OpenShift, Docker, ELK, ansible, python, Agile, Linux, WebSphere 9, Guidewire Insurance suite.

**Description**: Worked in the **BMO InvestorLine Wealth Management** division. BMO InvestorLine offers a suite of web apps (external and internal), mobile apps that provide investment clients with the ability to manage their wealth, including ability to trade stock. The project involved developing frontend angular progressive multi-screen web apps and mobile apps with java8/spring backend Microservices running on premise **OpenShift private cloud**.

Worked at CoOperators Guelph office as lead developer customizing Guidewire products.

**My Role/Achievements**:

○ Full Stack Lead developer for frontend/ backend and integrations to existing source systems.

○ Create SpringBoot and python/flask based microservice JSON REST APIs.

○ Develop unit and integration tests, address security scan issues, OWASP vulnerabilities, puppeteer testing.

○ Automated UI (selenium, protractor) and backend testing, devops CI, builds utilizing Docker, jenkins, Openshift.

**Project #6: Dev Lead / PwC 365 - Google Play and App Store iOS app.** (Sept ’15 – Mar’16)

**Environment:** Android Studio, Java, XCode, Swift, Adobe AEM(CQ) v6, JCR, Git, Linux

**Description**: 365 is PwC’s award-winning app, can be checked out at the **app stores** - <https://play.google.com/store/apps/details?id=com.pwc.pwc365&hl=en> and <https://itunes.apple.com/ca/app/pwc-365/id689591286?mt=8>. Worked on to bring to new devices, new AEM Java Content Repository (JCR) and roll to PwC different regions.

**My Role/Achievements**:

* Design and Development of Android and iOS apps’ integration with content on AEM backend services.
* Testing of mobile apps on multi form-factor phones and tablets.
* Participate and design on user registration module integration with AEM backend

**Project #7: OCIO Enterprise Services RESTFul APIs – TD Bank.** (May ’15 – Sept ’15)

**Environment: Node.js, JavaScript**, **Strongloop**, DB2, private cloud, **JWT, OAuth2.0,** GIT, XML/SOAP, Agile.

**Description**: The Office of the CIO (OCIO) API Program champions the creation and use of **Enterprise** APIs. The APIs greatly simplify the access to core domains (such as Party, Agreement, Transaction etc.) by providing a single interface and endpoint to access these business capabilities, abstracting the complexities of TD's books of record from channel applications. Worked as Node.js/Strongloop Lead Developer.

**My Role/Achievements**:

* Successfully completed 4 weeks of Node.js TD OCIO API Bootcamp training, earning the Certificate.
* Create acclaimed Java**AODA**Script Learning Material and Quiz by TD employees attending Node.js BootCamp.
* Gather requirements, create SDS on Confluence and Lead the implementation of Radar ATM Offers API.
* Design and Implement Mortgage Agreement and Party Offers API backend integrated with DB2 on z/linux.
* Helped in cloud migration of existing solutions and APIs.

**Project #8**: **The TD Mobile App - TD Bank** (Sept’14 - Feb’15)

**Environment:** Android Studio, REST, JSON, Maps API, NFC, Gradle, GIT, Jenkins, Nexus, Jira, Agile, hp ALM, Websphere 9

**Description**: Developed a full-featured **native** TD mobile application utilizing latest Android and iOS SDK. This app (<https://play.google.com/store/apps/details?id=com.td>) is available on Google Play and AppStore (<https://itunes.apple.com/ca/app/td-canada/id358790776?mt=8>).

**My Role/Achievements:**

* **Developer Lead** for mobile payments module using **NFC**.
* Implement login with the TD backend using RSA - multi-factor Authentication (MFA)
* Creating a responsive mobile design utilizing **Fragments**.
* Develop Wealth management iOS module using ObjC, XCode.
* Develop integration with RESTful backend web services and Implement Omniture Analytics tracking.
* Create technical documentation and help the marketing team in showcasing new app features.

**Project #9**: **Court Cases Information Systems / e-Meetings – City of Toronto** (May’13 - Jul’14)

**Environment:** Eclipse/RSA/RAD, Oracle 11g, **JPA**, **WebSphere** 9, ICON, s3270, **AngularJS**, **Bootstrap, Linux**

**Description**: City of Toronto is providing court cases web services for citizens and their representatives, by allowing the inquirer to get their own information reducing lineups, improve productivity at the counter and customer satisfaction. Users can self-serve by registering and arranging e-meetings. The project won the coveted Municipal Information Systems Association of Canada **(MISA) Award**.

**My Role/Achievements:**

* **Lead** the **development** of modern JEE 6 application along with System Analysis and Database design.
* Create storyboards, demonstrate web app design ideas to achieve team consensus on Interfaces.
* Develop integration **REST** **web services** API on WebSphere 8 **ESB**.
* Create a secure Admin module for live application maintenance utilizing **Spring Security**.
* Integrate over secure telnet connection (**s3270**) to MAG’s Mainframe based **ICON** System.
* Support Web Admins install and configure connection to ICON from production servers.

**Project #10: WSIB – Form 8 Electronic iPAD.** (Nov ’12 – April’13)

**Environment**: RAD, Java, WebServices, Websphere 7, XML, iText, XCode4, ObjC, JIRA

**Description**: Working with **iOS** application environment, custom Views and animations are developed to help professionals fill and submit Form 8 for worker injury electronically. On the **Websphere** side, staff monitors the submitted forms for the back office, archiving, audit and payment processes the submitted forms.

**My Role/Achievements:**

* Design and Implement the mobile app and server backend.
* Testing of mobile applications on various iPAD sizes and resolutions.

**Project #11**: **Mobile Dental Screening -** Ministry of Health (Nov’09 – Oct’12)

**Environment**:Java, HTML5, SOAP Web Services, JavaScript, AIX, Acrobat Pro, Oracle11g, iText, Struts2, Spring

**Description**: The project allows dental health screeners to perform mobile screening of Ontario students at school as part of Healthy Smiles Ontario (HSO). The mobile database is encrypted per OPS Data Security standards.

**My Role/Achievements:**

* Create a modular JEE web application, web services, utilizing Struts and Spring.
* Implement mobile screens, integrate with back-end Web Services.

**Project #12**: **Rogers.com and Fido.ca Re-platform & Redesign** - Rogers. (Aug’07-Nov’09)

**Environment**: **Oracle Weblogic Portal** 10g, **Service Bus** (ALSB), SOA, SOAP WebServices, Informatica, Cognos, Oracle 10g, **Android**, Apache, Red Hat Enterprise Linux 4.0 (RHEL)

**Description**: Worked as **IT Lead**, foresaw the implementation, integration with multiple backend projects including Payment Card Processing, order management to realize the myriad functionality of public facing fido.ca and Rogers.com. Responsible for Code review, continuous integration and production change management.

**My Role/Achievements:**

* Provide Technical Leadership, **Design** guidelines, guide in detail design documentation.
* Created **Single Sign-on (SSO)** platform for third party site integration onto Fido.ca portal.
* Lead the mobile apps development of Fido and Rogers **My Account** available on **AppStore**.
* Created real-time log viewer web application conceiving a hack into ALSB messages, interconnecting calls as they move b/w myriad of system boundaries. The tool brings **huge** savings in troubleshooting costs at Rogers.

**Education**

Bachelor of Technology**, Indian Institute** of **Technology Delhi**, India

**Professional Training and Continuing Education**

* Completed **2 Day SpringBoot** course with Pivotal (2020)
* **AWS Cloud** Summit, Toronto (2018)
* StrongLoop **Certified Node.js Developer** (2016)
* **Node.js** based API Development using **StrongLoop** at TD BootCamp (2015)
* **Accessibility for Ontarian with Disability Act (AODA**) training at City of Toronto (2014)
* Completed the course **Mobile App Analytics Fundamentals** by Google (2014)
* Sun **Certified** **Programmer** for **Java** Platform (2005)

**Skills Listing**

**Hardware:** Intel Windows and Macbook Pro

**Operating Systems:** OSX, Windows, Linux (RedHat, Ubuntu), VirtualBox, Docker, Kubernetes

**Languages:** Java, C/C++, Swift, ObjC, XML, SQL, PL/SQL, JavaScript, HTML/DHTML

**IDE/Dev Tools:** XCode, Android Studio, VSCode, SQL Developer, DBeaver, Maven, webpack, rollup

**Databases:** Oracle, PostgreSQL, MySQL**,** SQL Server, DB2, SQLite

**Application Servers:** WebSphere, WebSphere Liberty, Weblogic, JBoss, Tomcat

**Content Mgmt:** Vignette, Stellent, OpenCMS, Contentful, Adobe AEM

**Web Browsers:** IE, Firefox, Chrome, Safari, Mobile Browsers

**Directory Servers:** Active Directory, IBM Tivoli, OpenLDAP

**GUI:** UIKit,JSF, JSP, Swing/JavaFX, JavaScript/AJAX, Angular, React, Android SDK

**Modeling Tools:** Rational Software Architect, Erwin, Miro

**Frameworks:** Hibernate, Spring, loopback, iText, log4j, JUnit, Selenium,lucene

**Standards:** OOAD, SOA, RUP, XP (eXtreme Programming), Agile, OAuth2.0/OIDC