JAVA DEVELOPER, ON CONTRACT

Professional Summary

Intelligent, career-focused software development professional with 2 years of experience developing software programs using Java. Accomplished Electrical Engineer with 2 years of research, analysis, and development experience on MEMS and semiconductor devices. Enthusiastic professional with an HI-B Visa who is committed to finding a full-time permanent software development position in the semiconductor industry. Quick learner who is proficient in operating photolithography and microscope equipment for silicon fabrication and material characterization. Reliable worker who learns new processes quickly and thrives in a team environment.

Experience

Java Developer, On Contract 04/2013 to Current Albertsons Company Inc. North Cape May , NJ

Created a new application with Maven (mvn) project structure using Agile software development methods. Developed queries to retrieve data in batches from the MSSQL database. Utilized Hibernate development logic to populate DTO (Data Transfer Objects), and used the RTC tool to source code control. Integrated Dagger and Guava APIs (Application Programming Interface) into the code base. Created test scenarios using both JUnit and Mockito test frameworks.

- Cut the amount of time to run the revenue allocation engine application by 10 minutes (from 60 to 50 minutes) by developing the application architecture using OneView.

Java Developer 10/2011 to 03/2013 California Institute Of Technology Pasadena , CA

Provided and built a restitution module for an in-house development project, working in an Agile environment and using Subversion (svn) to source code control. Constructed a Web module using the Spring MVC framework. Utilized the following technologies during project development Spring, Hibernate, JMESA, YUI, JDBC, JSP, Oracle 11, and Tomcat. Developed and redesigned the graphical user interface (GUI) of client screens to accommodate business requirements. Assisted in changing the database structure to reflect new requirements. Created a Hibernate configuration and mapping file for the application. Executed YUI and JMESA APIs to improve the GUI and online forms. Programmed HQL logic to generate data for form requests. Developed a variety of test scenarios using the JUnit test framework.

- Redesigned the User interface of Wells Fargo's Restitution Form to match their business requirements. Suggested changes in the form that resulted in improved usability, reducing the time to complete the form.
- Proposed and implemented changes to the database structure of the restitution module, which resulted in a lower number of related tables that provided much better coupling between the older application and the newer restitution module.

Research Lab Assistant 07/2010 to 10/2011 Children's Mercy Hospital Overland Park , KS

Created Standard Operating Procedure (SOP) documentation for lab equipment. Assisted graduate students with FEA analysis using Coventorware software and L-Edit. Collaborated with project groups to develop FEA analysis for devices based on voltage and pressure actuations.

Student Computer Tutor 08/2008 to 05/2010 REACH Computer Research Center, University Of Louisville City , STATE

Mentored students on programming languages, including C and C++, and assisted them in writing simple programs. Helped students create high-quality research papers and presentations using MS Office and other software tools. Trained students on basic computer and Internet skills. Maintained computer equipment, performed regular software updates, and cleaned equipment.

Student Research Assistant 08/2006 to 08/2008 Knudsen Pump Research Project, University Of Louisville City , STATE

Collected and tabulated necessary material properties data for the project. Performed mathematical calculations with data for theoretical device design. Completed FEA modeling and analysis of the pump device to demonstrate practicality of the component. Performed a lithography experiment to generate narrow channels (1 um in width) using SU-8 2000 photo-resist technology.

Education

Master of Science : Electrical and Computer Engineering May 2010 The University of Louisville City , State

Projects Â

MS Thesis: Modeling of a RF MEMS Switch. Built a device using CAD software, and simulated the device using a Finite Element Analysis (FEA) tool. Successfully determined the device operating parameters such as actuation voltage and switching speed for different voltages.

Microfabrication of Pressure Sensor: Designed a pressure sensor device to operate at 100 psi. This device was fabricated using a four-mask process in a class 100 MEMS clean room.

Design and Simulation of Comb Actuators: Performed mathematical calculations to design a device with 50m displacement. FEA analysis was done to successfully verify the device's performance.

Research Paper: Beyond Moore's Law. Authored a research paper as a part of a course work focusing on Moore's Law and its importance in current and future micro devices.

Bachelor of Engineering : Electrical Engineering May 2005 Pune University City , India
Cambridge University-Affiliated BBC Institute India

Public Speaking and Business English

Professional Affiliations

Member, Institute of Electric and Electronic Engineers (IEEE), 2001-2005.

Organizing Member, IEEE Chapter; Bharati Vidyapeeth College of Engineering, Pune, India, 2003-2005.

Organizing Committee Member, Association of Students of Electrical Engineering (ASEE); Bharati Vidyapeeth College of Engineering, Pune, India, 2003-2005.

Skills

Programming languages: C, C++, Java, SQL and VHDL.

Programming frameworks: Spring, Hibernate, JUnit, Maven, YUI, JMESA and EJB.

Programming tools: IntelliJ, NetBeans, Eclipse, Tomcat, Oracle 11g and MSSQL.

Mathematical software: Maple and Matlab.

Microfabrication programs: L-Edit, Coventorware, Solid Edge, Silvaco and Deckbuilt.

Clean room equipment: lithography equipment, Dektak profilometer, SEM and Microscopy.

Productivity tools: MS Office (Word and Power Point).

Operating systems: Windows 98/Xp/Vista/7, Linux, Ubuntu and Mac OS X.