ROHIT ARVIND KULKARNI

Portfolio: www.rohit-kulkarni.com | **LinkedIn:** www.linkedin.com/in/rohitkulkarni1 | **GitHub:** https://github.com/rohitk10

SUMMARY

- 4+ years of academic experience in various phases of the Software Development Lifecycle
- Expert knowledge in Core Java, J2EE and Spring
- Exceptional analytical and communication skills
- Experience in Object Oriented Programming (OOP) and Object Oriented Designing (OOD)
- Strong knowledge of Data Structures and Algorithms
- Experience in a team oriented working environment using SCRUM Agile Software Development methodology
- Experience with Distributed Version Control System (DVCS) Git and hosting service GitHub for several collaborations
- Experience in Frontend and Backend development
- Hands on experience with web development technologies like HTML5, CSS3, Bootstrap 3 and jQuery including development, publishing and maintenance of multiple websites
- Experience with several IDEs mainly Eclipse, Sublime Text, IDLE, BlueJ and Processing
- Knowledge of open source frameworks like Spring, Java Swing, jQuery, Bootstrap and Canvas
- Strong knowledge of Java Collections framework
- Knowledge and hands on experience in eCommerce principles like Search Engine Optimization (SEO), Search Engine Marketing (SEM) and A/B testing using tools like Google Analytics, Google Search Console (Webmaster), AdWords and Wordpress
- Several years of experience using Linux (Ubuntu) and Windows (XP/ 7 / 8/ 8.1/ 10) operating systems
- Knowledge of Data Modelling using UML
- Knowledge of Database programming and management using Oracle and SQL
- Development experience with several programming languages including Java, C++ and Python
- Experience with scripting languages like Bash and Python
- Highly motivated self learner and a team player with excellent problem solving skills

EDUCATION

- **Stevens Institute of Technology, Hoboken, NJ** **Jan, 2017**

Master of Science in Electrical Engineering. Concentration: Software Engineering **GPA: 3.63**

- **University of Mumbai, Mumbai, India** **Jun 2015**

Bachelor of Engineering in Instrumentation **GPA: 3.6**

SKILLS

Programming Languages	Java(Expert), C++(Intermediate), Python(Intermediate), Shell script(Bash)
Web Development	HTML5, CSS3, Bootstrap 3
Frameworks	Spring, Java Swing
Database	Oracle 11, SQL, JDBC
Operating Systems	Linux(Ubuntu), Windows
Software Development	SCRUM Agile Methodology, Spring MVC, Data Structures/ Algorithms, Apache Tomcat
IDEs/ Software Tools	Eclipse Mars, Git CVS, Sublime Text, IDLE, GitHub
Graphical Languages	Postscript, Ghostscript, Processing

EXPERIENCE

Stevens Institute of Technology, NJ **Jan 2016 - Present**

Role: Teaching Assistant, Java Programming

Responsibilities

- Tutor and mentor graduate students enrolled in the course CPE 810J - Java Programming
- Assist faculty members with examinations, projects, assignments and homework
- Conduct bi-weekly mentoring sessions for graduate and undergraduate students
- Develop a course plan and keep record of course progress
- Grade programming assignments weekly
- Assist guest lecturers with presentations
- Proctor tests and examinations
- Participate in graduate course seminars and information sessions for new students

PROJECTS

Employee Management System **March 2017 - June 2017**

Project Description: The Employee Management System is a Java Application built using Spring MVC architecture. It is composed of various modules accessible by Administrators, Managers and Employees. It has a front end for logging in and using the features for viewing and modifying information. In the backend, a database stores employee, admin and department information.

Technologies used/ Environment

Java 8, J2EE, Spring MVC, Apache Tomcat, HTML5, CSS3, Eclipse Mars IDE, Oracle 11, Java Swing, JSP, Windows

Responsibilities

- Developed several core **Java** interfaces and classes following the **Object Oriented Programming** principles
- Designed the application using **Spring MVC** architecture
- Wrote a Java code that created a **JDBC** connection and interacted with a backend **Oracle** database containing Employee details
- Created a simple front end GUI using **HTML5, CSS3, Bootstrap 3** and **JSP**

Canvas: An automatic Bulk Grading Application **Feb 2016 – May 2016**

GitHub link - https://github.com/patilprasad/CanvasManipulation-java/

Project Description: Canvas is a grading application currently being considered for actual use by the Stevens Institute of Technology ECE department. It is designed to be used by university and school professors for grading assignments and homework of several students quickly. A simple GUI allows users to to perform several tasks like download all students' assignments; automatically compile and run classes; observe the output and assign a grade. All secure information can be shared and viewed online by students and professors using the Canvas API by Instructure.

Technologies used/ Environment

Java 7, Eclipse Mars, Git, GitHub, Bash, Java Swing, Linux Ubuntu 15.04

Responsibilities

- Designed a Java application, using several **Object Oriented concepts**, to download a zip file containing several source codes, uncompress it, compile it using **Java Runtime Environment** and display the output for the grader to evaluate (File types supported: .java, .cc, .cpp, .py)
- Created a **GUI** using **Java Swing class**
- Analysed individual student and class performance in real time using **Java URL class**. Displayed the data graphically using external libraries
- Used **UML modelling** for the project planning and **UML diagrams** to represent class structure and object relationship
- Collaborated with project members using **Git** Version Control System and **GitHub**
- Performed **time and space optimization** by using several **Java Collections** classes to store student information

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CheapSoccerShop: Complete development and maintenance of an eCommerce website **Sep 2016 - Dec 2016**

Project Description: CheapSoccerShop is an eCommerce website developed from scratch using web development technologies like HTML, CSS, Bootstrap and Wordpress. The project lasted four months and utilized the SCRUM Agile Software Development methodology. Extensive Search Engine Optimization (SEO) was performed resulting in the website being placed on the first page of Google search results. Keyword research was performed using the Qualified Keyword Effective Index (QKEI) technique and a new site map was created to increase page ranking with Google. By the end of the project, a complete eCommerce website was published live with hundreds of products and a secure payment/ checkout page.

Technologies used/ Environment

HTML5, CSS3, Bootstrap 3, Wordpress, GitHub, GitHub Pages, Sublime Text 3 IDE, Google Chrome, Linux Ubuntu

Responsibilities and Outcome

- Created, published and maintained an **eCommerce** website over a period of four months using **HTML5**, **CSS3**, **Bootstrap 3**, **Wordpress** and **jQuery**
- Used **SCRUM Agile software Development** methodology throughout the lifecycle of the website
- Analysed website traffic using **Google Analytics** to find out peak traffic hours among various demographics
- Marketed the website by executing **Search Engine Optimization** (**SEO**) as well as **Search Engine Marketing** (**SEM**) using tools like the **Google Search Console** to successfully display the website on the first page of google search results
- Updated and reviewed the **XML** sitemap regularly to ensure intelligent crawling of the website by search engines
- Updated the website for mobile compatibility using the **Bootstrap 3** Grid functionality
- Performed further **SEO** by reviewing Title tags, Meta tags and Product Image tags
- Performed Search Engine Marketing (**SEM**) using **Google AdWords** and a search campaign to increase website traffic by **100+ visitors** in the period of 2 weeks
- Performed **A/B testing** on key webpages to increase conversion rate by **11%** over a period of 8 weeks

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PostScript: A dynamically typed Vector Graphics Application **Oct 2015 – Dec 2015**

GitHub link - https://github.com/rohitk10/Postscript

Project Description: This is a graphics application that allows users to create graphical images using typed commands. The user can either start from scratch and concatenate shapes together to create a design or use built in classes that handle complex designs like graphs and charts. The resulting .ps file contains all the best features of the PostScript language including better color handling and high quality line art without the user having to learn a whole new programming language.

Technologies used/ Environment

C++, Postscript, Ghostscript, Sublime Text 2 IDE, Bash, Git, GitHub, Linux Ubuntu 14.04

Responsibilities and Outcome

- Developed a **C++** code that integrated with **Postscript** to create a concatenated design
- Created a command line interface for the user to enter basic commands that get translated to **PostScript** commands
- Performed file handling using **C++** and **Ghostscript** to store the .ps file containing the user's graphics
- Used **UML modelling** to organize the project into classes and header files
- Used **Object Oriented concepts** to create several classes and objects based on functionality ranging from fifteen basic geometrical shapes to complex designs like bar graphs, line charts and the Mandelbrot set

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PySport: A predictive software for sports matches **Mar 2016 – May 2016**

GitHub link - https://github.com/rohitk10/PySport

Project Description: PySport is an application developed using the Python programming language. It predicts the result of sports matches using gathered data from social networking sites like Twitter and Facebook. Depending on the accuracy of the prediction or the amount of raw data desired, a combination of Bash and Python scripts start collecting tweets and posts related to a sports team or a

match. Then, keyword and pattern matching is used to make sense of this raw data. Finally, using external Python libraries, a prediction is made and displayed graphically.

Technologies used/ Environment
Python 2, IDLE IDE, Bash, Git, GitHub, JSON, RegEx, Linux Ubuntu 15.04

Responsibilities and Outcome
- Wrote a **Bash** script and a **Python** script to gather data from popular social networking websites and store it as a raw text file
- Used the **tweepy** library to extract tweets from the raw data collected in **json** format
- Segregated the tweets according to nationality and language to perform accurate analysis and keyword matching
- Analysed the data using **numpy** and **regex** to look for trends, patterns and positive keywords
- Used the **matplotlib** library to plot the inferred results graphically
- Collaborated with project members using **Git** VCS
- Tested the results for 8 weeks, obtaining 60% accuracy on predictions

AWARDS
- Recipient of Master's Fellowship award 2015 - 2016

AVAILABLE IMMEDIATELY AND WILLING TO RELOCATE ANYWHERE IN THE USA