Piyush Bajaj

San Jose, California

piyushbajaj0704@gmail.com   +1 669-281-9534

Education

San Jose State University	M.S. Computer Science	Expected - June 2019
Microsoft Summer School	Machine Learning	Completed - June 2015
Bangalore Institute of Technology	B.S. Computer Science	Graduated - May 2015

Work Experience:

Associated Students, SJSU - Web Developer Intern   **San Jose (Feb 2018 – Present)**

- Deployed the voting application developed using JSP, PHP, SQL Server which was successfully used in the Spring 2018 A.S student government elections at San Jose State University.

Unisys Corporation - **Associate Engineer**   **Bangalore (July 2015 – July 2017)**

- Redesigned the Web Administrator Application with Bootstrap and SASS pre-processor which provided an intuitive UI experience.
- Developed and incorporated features to achieve a 5% higher transfer rate written in Java for communication products.
- Reported 80+ issues to stabilize Apex Administrator Application under Unisys OS.

Zomato - Software Developer Intern   **Gurgaon (Summer 2015)**

- Worked with the Zomato's Desktop team developing first of its kind prototype of a web app which enables customers to make restaurant reservations online in real time.
- Analysed the best implementation for table allocation system, researched relevant UI frameworks and JavaScript libraries which enabled a seamlessly faster integration.

Microsoft – Developer (Student Partner)   **Bangalore (April 2014 – June 2015)**

- Worked on integrating chat application using Node.js on Microsoft student community portal.
- One of the judges in Microsoft's prestigious Imagine Cup Challenge where I helped and evaluated most of the windows game application submissions by high school students.

TreeWalker Technologies - Web Application Intern   **Bangalore (Spring 2014)**

- Designed a Stack Overflow inspired web application using PHP, AJAX, Code Igniter Framework which leveraged employee's collaboration by 40% in a span of 3 months.

Skills

- **Languages and scripts:** Java, C, C++, JavaScript, Python.
- **Web technologies:** Node.JS, Express.JS, HTML, CSS, AJAX, jQuery, Bootstrap, JSON, XML, SOAP, RESTful services.
- **Databases:** Oracle, MySQL, SQL Server, PostgreSQL, MongoDB.
- **Cloud technologies:** Amazon Web Services, Vagrant, OpenStack, Docker, CloudSim
- **Big data:** Apache Hadoop, HDFS, MAPR, Hive, HBase, Spark, Kafka
- **Application Development Frameworks:** J2EE, Spring.
- **Machine Learning Techniques:** Neural Networks, PCA, SVM, Decision Trees.
- **Machine Learning libraries:** SciKitLearn, NumPy, Spark, TensorFlow
- **Operating System:** Linux, Windows.

Academic Projects

Driver Sleep Detection System – Computer Vision Application
Implemented a monitoring system to indicate driving aptitude of a driver and alarm is raised based on eye blink and mouth yawning rate of the driver if fatigued. *Used C, Viola-Jones, Sobel, and SVM.*

Mars Rover – 3D Object Manipulator
Built a direct manipulation interface for selection, navigation and manipulation of the mars rover on a 3D Martian terrain model. *Used open Frameworks and C++.*

Farm IoT data processing and analytics – Big Data/Machine Learning
Designing a Big data as a Service framework where we can do real-time data stream processing of plant's health via green color index and growth rate by providing statistical analysis for prediction. *Used Node.js, Spark, MongoDB, Python, AWS, ML Library.*

Load Balancing Algorithm Framework– Cloud Computing
Implementing an advanced fuzzy clustering algorithm to manage load efficiently across multiple nodes in a constrained Cloud Computing environment. *Using Java, CloudSim.*

Side Projects

Hola – Find your friend
Creating a web-app where a user can register via Facebook and view neighboring friends in real time over a Google Map interface. The user can narrow search results based on various input parameters. *Used JavaScript, MongoDB, REST, Google Map API, Facebook Graph API v2.10.*

Faces of BIT - Campus Connect Networking Platform
Launched a social networking site in my campus to help students to get to know other students by liking each other photos and making interaction happen in a more fun way. *Used PHP, jQuery.*

Balloons Burster - Windows 8.1 Store App
Developed a Window's Desktop game where one can compete with other players and earn points by shooting balloons in each time frame. *Used Win JS based on Microsoft web stack, Bootstrap.*

Online Mart - SureWaves Hackathon
Designed a Quotation Management System for products for known customers considering various stakeholders and entities in the database system of SureWaves. *Used PHP, HTML5 and REST.*

Extracurricular

- Winner at 36 hours SureWaves Hackathon 2014.
- Certified in "Mobile App Analytics" by Google.
- Certified in "IoT and Smart Services Technology" by SAP.
- 2nd in app development at IIT Mandi.
- Certified by University of Toronto in "Programming Fundamentals".

GitHub: github.com/piyushbajaj0704

Portfolio: piyushbajaj.in

LinkedIn: linkedin.com/in/piyushbajaj0704