
EDUCATION

- Masters in Computer Science - **Rutgers University**, New Brunswick, NJ – **3.67 GPA** [May 2017]
- B.E. in Computer Science & Engineering - **CCET, Panjab University**, Chandigarh, India - **3.88 GPA** [2013]

TECHNICAL SKILLS

- **Languages:** Java (Proficient), C# (Intermediate), Python (Intermediate), PHP (Proficient), SQL (Proficient), JavaScript (Intermediate), HTML (Proficient), CSS (Proficient), R (Basic)
- **Technologies:** Spring MVC, Hibernate, ASP.NET MVC 5, Hadoop, Spark, HBASE, AWS [S3, EMR, EC2], Bootstrap, Git
- **Tools:** Eclipse IDE, Visual Studio, Sublime Text, MYSQL Workbench, GitHub, Putty, Linux, Microsoft Office

WORK EXPERIENCE

- **Center for Advanced Infrastructure & Transportation, Rutgers University** – Piscataway, NJ [March 2016 – Present]
 - **Software Developer & Graduate Assistant**
 - **US DOT Long Term Bridge Portal**
 - **Technology Used:** C#, ASP.NET MVC5 Framework, MSSQL, JSON, Kendo UI, JQuery, Bootstrap
 - Worked on Area Select and Search Tools using JQuery, Canvas.js and Google Map API.
 - Implementing ETL Process, Database Schema, Stored Procedures and Search Tools for 300 Bridge Parameters of Legacy USDOT NBI Semi Structured Bridge Data.
 - **Microsoft HoloLens – 3D Bridge Heat Map Data Visualization**
 - **Technology Used:** C#, Unity 3D, Microsoft HoloLens Augmented Virtual Reality Platform
 - Visualized Bridge Deck Parameters as Heat maps on Augmented Virtual 3D Bridge Models.
 - **Bridge Deterioration Modelling and Legacy Data Mining on Bridge NBI data**
 - **Technology Used:** R, Python
 - Preprocessing and Transforming National Bridge Inventory and National Bridge Elements Data
 - Creating Deterioration Model by using curve fitting Weibull Distribution and predicting future Bridge states using Random Forest and Neural Networks.
- **Webart Softech** – Panchkula, Haryana (India) [June 2013 – August 2015]
 - **Web Application Developer**
 - **Vipcars.com**
 - **Technology Used:** Java, PHP, XML, JSON, MYSQL, JavaScript
 - Worked in a team to build, integrate and maintain horizontal services for around 110 multi-lingual associate websites on top of multi-tier Car Rental Broker Management System (CRBMS).
 - Built a real-time XML, JSON data feed aggregator from car rental vendors and used data visualization library to show analysis from 3000 online ad campaigns.
 - Developed solutions based on PHP Laravel MVC and Wordpress framework.

INTERNSHIPS

- **Massive Web User Data Collection And Analysis - Net Solutions India, Chandigarh** [January – June 2013]
 - **Technology Used:** Java, Apache Hadoop, HBASE, Kafka, Tomcat Servers, PHP, JavaScript, MySQL
 - Used Kafka and HBASE for storing streaming user click data (5000 hits/second) collected using a JavaScript API.
 - Designed ETL process using Hadoop Map Reduce Job to speed up when loading Visualization and Analysis on PHP Web Application.
- **Small Business Management & Ecommerce Solution - Net Solutions India, Chandigarh** [June – July 2012]
 - **Technology Used:** PHP, Java, Android SDK, HTML, CSS, JavaScript, MySQL
 - Developed a Web and Android Mobile Application for small retailers to sell product in localized areas.

TECHNICAL EXPERIENCE

- **Dynamic Topic Modelling Using Latent Dirichlet Allocation – Present Graduate Academic Project**
 - Studying Evolution of latent Topics in more than 4.5 Million scraped Reuters News Article archives.
- **Faster RCNN with 152 Layer ResNet for Caltech Pedestrian Detection Dataset – Graduate Academic Project**
 - A Convolutional Neural Network for object detection for a comparative analysis of different ResNet CNN models by benchmarking on naive implementations of CNN like ZFNet and VGGNet.
- **Chess Data Map-Reduce Analysis – Graduate Academic Project**
 - Map-Reduce jobs on 12 nodes of AWS EMR Hadoop cluster to Analyze Win/Lose Pattern on 22 million Chess Games stored as Flat Files in Amazon S3 Storage.