NISARG PATEL

198 Main Street, Binghamton-13905, NY

linkedin.com/in/nisarg2151/   npatel49@binghamton.edu**; (607) 374-0441**   nisarg2151.github.io

EDUCATION

MS, Computer Science (GPA: 3.93)	**Aug 2017 – May 2019**

State University of New York at Binghamton, New York

BE, Computer Engineering (GPA: 3.6)	**Jul 2009 - Jul 2013**

Sardar Vallabhbhai Institute of Technology, Gujarat, India

RELEVANT COURSEWORK & RESEARCH INTERESTS

Programming for the Web	Machine Learning	Database Systems
Object Oriented Programming	Cloud Computing	Distributed Systems

Data Analytics, Dynamic Web Technologies & Cloud Computing

TECHNICAL SKILLS

Programming	: Java, JavaScript, Node.js, Typescript, PHP
Database	: Oracle(SQL, PL/SQL), MongoDB, MS SQL, Druid
Web Technologies	: Angular 2+, HTML, CSS, jQuery, HighCharts, Bootstrap
Cloud & Containers	: Docker, Kubernetes, Google Cloud Platform
Tools	: Eclipse, Maven, VS Code, Tomcat, SQL Developer, Git, SVN, TFS

PROFESSIONAL EXPERIENCE

Full Stack Developer for Cornell University at Ithaca, NY   **Feb 2019 – Present**

- Work with **Social Media Lab at Cornell University** to develop a web application for social media experiments and education, a **social media simulation** used as an educational tool for middle school students
- Refactor and add to the existing **server-side logi**c, making changes to the **MongoDB schema**, and including these changes to the **front-end**
- Work in **Node.js, Express** and Passport, deal with various quirks and workaround of a**synchronous programming**
- Work on **server-side templating** like Pug.js and other front-end technologies such as **HTML5/CSS3 and jQuery**
- Perform basic **DevOps duties** like deploying and monitoring Node web application (Nginx as a proxy server, PM2)
- Containerize current application using **Docker** and deploy it in cloud based platform using **Kubernetes** to make it horizontally scalable, use **Git** as version control and collaboration tool

Graduate Research Associate for United Health Services at Binghamton, NY   **May 2018 – Feb 2019**

- Work with **BI Dept at UHS Hospitals to** manage comprehensive data warehouse and **perform analytics**
- **Developed dashboards** using **PHP, Angular & JavaScript** with trending data, charts and demographic charts with drill downs, utilizing data aggregation from SQL statements
- Used PHP to develop REST APIs that utilize data from Procedures and Queries developed in T-SQL
- Utilize JSON based REST services in Angular and JavaScript to develop rich dashboards based on Google material design philosophy
- Create **tables, indexes and stored procedures** as a part of the data migration initiative

Software Engineer-Product Development for Harman (Samsung), Pune   **Apr 2016 – Aug 2017**

- Develop and design **dashboard, custom reports, and ad hoc queries** for **huge volumes of network data**
- **Used Spring Rest Controllers, Spring Web MVC and Spring Boot extensively to implement server-side business logic, Developed RESTful API with Spring 4**
- Created **Reusable Components, Modules, Custom Directives, Pipes, Routers, and Services** in TypeScript to consume REST API's using Component based architecture provided by **Angular 2**
- Developed the persistence layer using Hibernate Framework, created the POJO objects and mapped using Hibernate annotations and Transaction Management
- Installed & Configured **MySQL, HDFS, Kafka, Druid, and Zookeeper** in a distributed cluster-based environment
- Add **new dimensions, metrics, and columns to the business model** layer to fulfil the requirements of the users
- Migrated **Relational data to Non-relational data stores** and ran performance tests against different NoSQL vendors
- Used **HighCharts library** extensively to develop complex **graph reports for huge volumes of data**

Software Engineer for Tech Mahindra Ltd. (Client: AT&T) at Pune   **Sep 2013 – Mar 2016**

- Involved in various steps of **SDLC such as analysis, design and development** of system and developed specs that include Use Cases, Class Diagrams, Sequence Diagrams and Activity Diagrams
- **Coded, designed, and tested** for assigned modules, live defects with strict timelines, followed **agile methodology**
- Worked one-on-one with client to develop layout, color scheme and implemented it into a final interface design
- Designed and developed the **UI using JSP, HTML, CSS, JavaScript, AJAX and JSON**.
- Worked extensively with Oracle database, developed custom **SQL queries and performed testing and data analysis** in an Oracle DB environment
- Worked with **high volume and complex PL/SQL** stored procedures and packages using TOAD
- Directly worked with Business Analysts and SMEs to gather requirements from the customer
- Participated in peer and **team meetings for code review** and analysis
- Used SVN for version control and code management
- Worked on **Java, Shell Scripts, SQL,** and ESP Workstation

SIGNIFICANT ACADEMIC PROJECTS

Auto Scalable and Highly Available Web Application on GCP   **Fall 2018**

- Leverage **Kubernetes on Google Cloud** to deploy a horizontally scalable and highly available web application
- Web application which performs steganography on images was developed using **MERN stack (MongoDB, React, Node and Express)**
- **Containerize** the application in to two separate containers each for client and server using **Docker**
- Setup **MongoDB on GCP** with multiple replica sets to ensure **redundancy and high availability**

Predicting Probability of ED Admission at the time of Triage (Lasso Regression, MATLAB)   **Fall 2018**

- Create and validate a prediction model to estimate the probability of hospital admission at the time of ED triage.
- Defining Attributes, Aggregating Data, Extracting Patient History and Preprocessing Data
- **Logistic Regression**, **LASSO Regularized Logistic Regression**(Winner) and **Random Forests** were applied on modeled dataset to achieve highest **accuracy of 80.24%** (Confusion Matrix) with appropriate **Bias -Variance Tradeoff**

Retail Business Management System   **Fall 2017**

- Develop **REST web services** using **spring and maven** to send data to frontend using JSON, Frontend was developed in **Angular 4** using Angular CLI, Bootstrap, and jQuery
- **Design database from scratch** for retail business setup comprising of products, customers, employees, purchases
- Write various triggers and procedures to maintain logs, keep an eye on inventory, and place order for products

AWARDS / RECOGNITIONS

- Going the Extra Mile Award (Awarded to most assiduous employee of the team)
- Place on the Wall of Fame (Awarded to top 5 employees every quarter)
- Client Appreciation (For Automations, reducing execution time by 30%)