**Viral Patel**

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**Education:**

* **Northeastern University - Boston, MA** *GPA:* **3.66**

Master of Science – Computer Science September 2019 – December 2021

*Coursework:*

* + Large Scale Parallel Data Processing (CS-6240)
  + Natural Language Processing (CS-6120)
  + Foundation of Software Engineering (CS-5500)
  + Web Development (CS-5610)
  + Algorithms (CS-5800)
  + Foundation of Artificial Intelligence (CS-5100)
  + Programming Design Paradigm (CS-5010)
* **University of Mumbai - Mumbai, India**  
  Bachelor of Engineering – Computer Engineering August 2011 – July 2014

**Experience:**

* **Summer Technology Analyst – Barclays**

*June 2021 – August 2021 | Boston, MA*

* Created and deployed end-to-end **ITRS Geneos** infrastructure using various **AWS services** that will allow monitoring of Barclays business infrastructure, reducing initial setup & maintenance efforts
* **Software Engineer Co-op – Quick Base**

*June 2020 – January 2021 | Boston, MA*

* Revamped customer-facing timeline report (Gantt Chart) UI used to visualize reports on Quick Base (Low-code/No-code) platform using **React.js**, **React Hooks**, **Redux** improving user interaction and usability by **80%**
* Back-end APIs were designed using **C++** for Data retrieval to populate features and perform CRUD operations based on user permissions or user role
* **Senior Software Engineer – Prolifics**

*November 2018 – August 2019 | Pune, India*

* Consulted and designed solution to track submitted Medicare claims improving claim processing time by **30%**
* Created a unique solution using **ITX**/**IBM WTX** and **MySQL** to help providers track and submit processed Medicare claims
* Worked on **JSON**, **XML**, **CSV**, and **ANSI X12** files
* **Technology Analyst – Infosys Limited**

*April 2018 – November 2018 | Pune, India*

* Consulted and designed solutions to process claims and manage enrollments for Health Insurance Company
* Led and mentored 3 freshers of EDI (Electronic Data Interchange) managed service team in troubleshooting enrollment and claim process failures in production
* Interacted with business clients for providing resolution/analysis for critical process failures, day to day incident management, and creation of break-fix SR
* Improved system design for claims extraction process that resulted in an **80%** reduction in turn-around time for ticket resolution and improved in work efficiency of the team
* Automated claim status inquiry processes using **Java**, **Shell Scripting**, **C**, and **IBM MQ** message system
* **Senior Software Engineer – Infosys Limited**

*October 2016 – March 2018 | Pune, India*

* Performed requirement gathering and effort estimations for file processing and transformation (to and from **ANSI X12**, **CSV**, **Fixed length**, **XML**) using **IBM WTX**/**ITX** based on requirement complexities
* Implemented a multi-file format project requirement using **IBM WTX** and shell scripting, which resulted in a **30%** increase in billing for the company from the client for project design and implementation
* Automated enrollment processes using **Java**, **Shell Scripting**, **C** and **IBM MQ** message system improving enrollment processing time by **90%** and reducing enrollment request turn-around time by **30%**
* Provided release support while production deployment and production check out
* **Software Engineer – Infosys Limited**

*November 2014 – September 2016 | Pune, India*

* Developed custom validations for healthcare batch transactions like 834, 835, 837, etc. and real-time transactions like 270, 271, 276, 277, 278, etc. using C and Shell Scripting along with custom maps development for various vendors using IBM WTX to convert ANSI X12, CSV files to Fixed Length files and vice versa

**Technical Skills:**

* **Languages:** Java, C, C++, Python, Shell Scripting
* **Technologies & Frameworks:** Hadoop MapReduce, Apache Spark, React.js, Redux, Node.js, RESTful Webservices, JavaScript, Bootstrap, HTML, CSS
* **Database:** MySQL, MongoDB, Oracle, MS-SQL
* **Tools:** Git, JIRA, Confluence, IntelliJ, VSCode, Postman, IBM WTX, ITX

**Projects:**

* **Distributed K-Means** – *Apache Spark, Scala, AWS EMR, AWS S3*

Implemented sequential version of K-Means algorithm in a distributed environment where one version of the algorithm parallelizes the computation for each k and another version performs clustering in a single task parallelizing computation of different k values. Implementation of the algorithm allowed me to understand various traits and logic required to implement the solution in a parallel system while understanding the query optimization logic used internally in the Spark system and how I can use it towards my advantage for faster execution

* **Opportunity Hack 2020** – *React, React Hooks*

Designed web-based proof of concept to visualize the AI-based model to filter mentors based on mentee preferences. The solution won 4th place in the hackathon out of 13 teams and 39 hackers

* **Chowk–Learning Forum** – *React, Redux, TypeScript, MySQL*

Designed UI of Q&A forum for students and staff like Piazza or Blackboard with the integration of Stack Overflow suggestions/solutions so that students do not have to wait for the professor in case solution is generic improving student’s efficiency to tackle problems by **40%**

* **White Board** – *React, Redux, Angular, TypeScript, Node.js, Spring Boot, JPA, MySQL, MongoDB*

Full-stack Learning Management Solution for faculty, students, and admins for efficient management of courses and quizzes improving professor’s content management efficiency by **75%**

* **Service Ticket Distributor** – *R, Design Thinking, Machine Learning Algorithms*

Begged Insta Award for building solution to automate ServiceNow ticket distribution among teams improving team efficiency by **30%** and reducing ticket turn-around time by **20%**