NEIL CHITRE

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EDUCATION

M.S. in Data Science, University of San Francisco **July 2022 - June 2023**
Relevant Coursework: Data Structures & Algorithms, Advanced Machine Learning, Distributed Computing (Apache Spark), NoSQL, Data Acquisition, Linear Regression, MLOps.

B.Tech in Computer Science, Manipal Institute of Technology **July 2014 - June 2018**
Relevant Coursework: Data Structures & Algorithms, Database Management Systems (SQL), Object Oriented Programming, Operating Systems.

PROFESSIONAL EXPERIENCE (4+ years)

Boost Sport AI, San Francisco **Nov 2022 - Present**
Data Science Intern

- Developed a sport-agnostic game prediction model using ELO ratings algorithm which forecasted the **win probability of sports teams** across leagues including the EPL, NBA and NFL.
- Implemented a robust data pipeline in **Python (SQLAlchemy ORM)** to efficiently query and compile data from SQL databases into JSON.

Philips Healthcare, Bangalore **July 2018 - May 2022**
Senior Software Engineer - Full Stack

- Implemented the ROCC software using Python, Java and ReactJS which enables Imaging experts at a remote location to view and edit real-time MRI and CT scans, resulting in improved patient outcomes.
  - Led the development of the Multi-Console feature for ROCC, allowing Imaging experts to remotely perform multiple MRI and CT scans simultaneously. Reducing patient wait time by **14%**.
  - Designed a highly efficient and scalable database schema on **PostgreSQL** for ROCC.
  - Developed a high-performance backend **Python** application using **Flask** and **RabbitMQ** enabling seamless onboarding of new customers to the ROCC platform.
  - Designed and developed the RBAC (Role Based Access Control) microservice with Spring Boot to provide role based access control for users.
  - Implemented secure **Rest APIs** using **Java Spring**, connecting the ROCC user interface with backend infrastructure.
  - Developed and deployed 5+ Spring Boot microservices on Cloud Foundry using **Docker** containers, ensuring high availability and scalability.

Software Engineer - Full Stack

  - Wrote fast and efficient queries using **GraphQL** API, reducing the application load time by **20%** and patient connect time from 8 seconds to 3 seconds.
  - Implemented the critical video calling feature for ROCC using **ReactJS** and Twilio API, enabling real-time communication between radiologists and technologists.
  - Designed and implemented **JUnit** test cases for Java microservices to achieve **100%** code coverage and ensure the quality of software deliverables.
  - Developed a Selenium-based frontend test automation framework, reducing manual testing efforts and achieving a **30%** decrease in defects to production.

Wai Technologies, Pune **May 2017 - August 2017**
Data Science Intern

- Collaborated with the development team to build a **Recommender System** for educational modules, using **Matrix Factorization** to predict ratings for each user and item, enabling customers to discover relevant and engaging content.

ACADEMIC PROJECTS

E-Commerce Product Search for ASOS (Github Repo)

- Implemented an efficient and scalable product search architecture to process large scale data and provide accurate results to users.
- Used **Airflow** to build a streamlined ETL pipeline that automatically fetches data from ASOS API, pre-processes it, and stores it in a **MongoDB** database. Used TF-IDF in **SparkML** to create rich word embeddings and recommend similar products.

SKILLS

- Programming Languages and Databases: Python, Java, SQL, ReactJS, Shell Script, Javascript, MongoDB.
- Technologies/Frameworks: SpringBoot, Docker, Kubernetes, NodeJS, GraphQL, Google Cloud Platform (GCP), Flask, Pandas, Spark, Airflow, Numpy, Scikit-learn.