Jay Harkhani

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EDUCATION

University of Southern California (USC), Los Angeles, California   **August 2021-May 2023**
Master of Science in Computer Science with GPA: 3.75/4
Relevant Coursework: Analysis of Algorithms, Database Systems, Web Technologies, Game Development

University of Mumbai, Mumbai, India   **July 2017-June 2021**
Bachelor of Engineering in Computer Engineering with GPA: 3.8/4
Relevant Coursework: Data Structures, Distributed Systems, Machine Learning, Computer Networks, Operating Systems, Big Data, Systems Security, Data Mining

TECHNICAL SKILLS

Programming Languages:	Python, Java, JavaScript, C
Web Technologies/Frameworks:	Node.js, Django, Spring Boot, Angular, React, Docker, Flask, jQuery, Express.js, Android, DropWizard, Nginx, REST
Database Software:	AWS DynamoDB, MongoDB, MySQL, PostgreSQL
Tools:	GCP, Datadog, Jenkins, JMeter, Postman, Git, Unity, Tableau, Android Studio, SonarQube, Jira

EXPERIENCE

Software Engineer Intern, Twilio, Los Angeles, California   **May 2022-August 2022**
- Implemented Short Codes feature in Global Resource Routing(GRR) Service which will help company's customers and downstream services to configure/manage Short Code Resource directly from Twilio console.
- Increased code coverage by 12% by adding Unit & Integration Tests to identify bugs in the code before it is deployed.
- Updated JMeter script to enhance Load Test configurability by enabling/disabling tests on a per-endpoint basis.
- Modified Jenkins pipeline to run load tests with user-defined throughput values for each API and evaluate its metrics such as RPS, latency, cache hit, etc in Datadog dashboard.

Data Analytics Intern, The Shaadi Times, New Delhi, India   **May 2020-June 2020**
- Led in requirement gathering and collecting data about growth in Online Education Market due to covid-19 through web scraping and interacting with stakeholders in Education Industry.
- Implemented Python scripts for server setups, data storage, and executing queries on data.
- Created Tableau Dashboard and Reports to reduce time taken for making data-driven business decisions.

Software Engineer Intern, Tata Consultancy Services(TCS), Mumbai, India   **December 2019-February 2020**
- Processed data of more than 7000 customers of telecommunication company to remove redundancy and inconsistency.
- Led a team of 4 to construct a Machine Learning model with an accuracy of 90% to predict Customer Churn.
- Built a Customer Segmentation Tool for Marketing Team to boost customer retention rate and company profitability.
- Used Seaborn library to visualize customers' data based on demographics and other factors to support the Sales Team.

Software Engineer Intern, Nautilus Hearing Solutions, Karnataka, India   **August 2019-September 2019**
- Built a website using PHP and JavaScript to increase company's digital reach by making its hearing aid products accessible.
- Optimized Front-end code and SQL queries to reduce page load time to 8 seconds thereby enhancing website's performance.
- Created an Admin Panel to manage or post new content on the website and act on messages received from clients.

PROJECTS

Virtual Stock Trading   **February 2022-April 2022**
- Built an Android application and a website leveraging FinnHub APIs to provide up-to-date information about share prices, analyst buy/sell recommendations and market news to users.
- Implemented daily and historical charts by utilizing JavaScript's HighCharts library that helps traders to make a profit by performing technical analysis.
- Improved app responsiveness by calling APIs asynchronously and reducing average response latency by 50 seconds.
- Added Portfolio section with an initial amount of $25000 which can used to buy and sell stocks and Watchlist feature to monitor favorite shares.

  Website Link: https://client-dot-assignment-8-346123.wl.r.appspot.com/

Shuriken Strike   **January 2022-April 2022**
- Developed ninja-themed game with Unity where players use Shuriken as a weapon to destroy enemies & complete all 9 levels.
- Integrated Legacy Analytics Dashboard to enhance user gameplay by analyzing game metrics collected using custom events.
- Added freeze power-up that stops enemies for 10 seconds, along with hint and monetization feature to make the game more captivating.

  Game Link: https://sharktank.itch.io/shurican-strike

Smart Prosthetic   **October 2020-May 2021**
- Developed Machine Learning model with an accuracy of 80% that predicts day-to-day hand movements of amputee by utilizing Electromyography(EMG) sensor signals generated during contraction of muscles.
- Applied Isomap Decomposition on 6000 features in dataset to reduce computation time and improve model accuracy.
- Executed Holt-Winter Exponential Smoothing to remove noisy data from 900 signals captured from participants' hands.