

Jay Harkhani

San Jose, CA 95110 | (213) 551-4354 | jayharkhani999@gmail.com
<https://www.linkedin.com/in/jay-harkhani> | <https://github.com/JayHarkhani>

EDUCATION

University of Southern California (USC), Los Angeles, California

August 2021-May 2023

Master of Science in Computer Science with GPA: 3.87/4

Relevant Coursework: Analysis of Algorithms, Database Systems, Natural Language Processing, Web Technologies, Game Development

University of Mumbai, India

July 2017-June 2021

Bachelor of Engineering in Computer Engineering with GPA: 3.8/4

Relevant Coursework: Distributed Systems, Cloud Computing, Machine Learning, Artificial Intelligence, Data Structures, Big Data

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, MATLAB, C

Web Technologies/Frameworks: Nodejs, Spring Boot, Django, Angular, React, REST, Flask, JUnit, Mockito, Android, Docker

Database Software: MongoDB, MySQL, Amazon DynamoDB, Amazon RDS, Oracle, PostgreSQL

Certification & Tools/Services: AWS Cloud Practitioner, Jenkins, Ansible, Amazon S3, Kibana, Hashicorp Vault, Amazon EC2, Datadog, Tableau, Git, Apache JMeter, Postman, Jira, Unity

EXPERIENCE

Software Engineer, Viasat, San Jose, California

June 2023-November 2023

- Enhanced health monitoring system to deliver proactive alerts to users regarding deployment failures of services and resources within their sandbox, along with the development of a real-time Kibana dashboard for resource insights.
- Implemented a feature for future Viasat-4 satellites, which provides customers the flexibility to test sandbox resources with user-specified attribute values, facilitating customization and testing.
- Designed and implemented multiple Jenkins pipelines to automate updation of over 10,000 resources, streamline deletion of zombie CPEs, and enhance the customization of customer blueprints.
- Successfully optimized database by deleting over 5000 unnecessary resources, leading to cost savings and improved query performance.
- Created cron job to regularly push database backups to an Amazon S3 bucket, ensuring data reliability and disaster recovery.

Product Development Intern, AMD, Austin, Texas

January 2023-May 2023

- Built Cloud Mapper tool for Offline Speedbiner that generated a report with graphs and statistics required for getting insights and making decisions about chip units.
- Added multi-cloud plots to validate material from the Synthetic cloud against the Baseline cloud, using data collected from the Snowflake data warehouse.
- Created frequency-leakage plots that will help the team during part selection and limit the use of proprietary JMP software.

Software Engineer Intern, Twilio, Los Angeles, California

May 2022-August 2022

- Implemented SMS Short Codes feature using Java, which will assist downstream services of Global Resource Routing to configure Short Codes that customers use to send or receive about 100 messages per second.
- Increased code coverage by 12% by adding Unit and Integration Tests to identify bugs in the code before deployment.
- Updated Apache 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 in the Datadog Dashboard, such as latency, cache hit, requests per second, and so on.

Software Engineer Intern, Children's Hospital Los Angeles (CHLA), California

September 2022-December 2022

- Reduced the runtime of the ASL (Arterial Spin Labeling) pipeline by 25 minutes by automating the data extraction and transformation process for more than 100 patients.
- Added scripts in MATLAB to convert 160 MRI images generated per patient to the widely used NIFTI (Neuroimaging) file format.

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 to create Tableau Dashboards.

Software Engineer Intern, Tata Consultancy Services (TCS), Mumbai, India

December 2019-February 2020

- Processed data of more than 7000 customers of a 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.

Software Engineer Intern, Nautilus Hearing Solutions, Karnataka, India

August 2019-September 2019

- Built a website with 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 6 seconds, thereby enhancing website's performance.

PROJECTS

Virtual Stock Trading - [<https://client-dot-assignment-8-346123.wl.r.appspot.com/>]

- 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.
- Improved app responsiveness by calling APIs asynchronously and reducing average response latency by 50 seconds.

Shuriken Strike - [<https://sharktank.itch.io/shurican-strike>]

- Collaborated with a team of 8 to develop ninja-themed game with Unity where players use Shuriken as a weapon to destroy enemies & complete all 9 levels.
- Added freeze power-up that stops enemies for 10 sec, along with hint & monetization features to make game more captivating.