

Swathi Velicheti

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Education

University of New Hampshire, Manchester	January 2022 - May 2023
Shri Vishnu Engineering College for Women, Vishnupur, Kovvada Village, Bhimavaram	

Skills

Programming Languages: Python, Java, JavaScript, SQL, Data Structures and Algorithms

Web Development: React.js, Django, RESTful APIs, Full-Stack Development

Database Management: MongoDB, MySQL, PostgreSQL

Machine Learning: TensorFlow, Scikit-learn, Pytorch, Convolutional Neural Networks (CNN), Machine Learning Algorithms

Data Processing: PySpark, Data Analytics, Real-Time Data

DevOps & CI/CD: Docker, Jenkins

Cloud Computing: AWS EC2, Heroku

Web Security: User Authentication, Authorization, Data Encryption

Software Testing: Unit Testing, Integration Testing, Acceptance Testing

Methodologies: Agile Development, KPI Tracking, Data-Driven Decision-making

Libraries & Frameworks: OpenCV, Flask

Others: Data Privacy, Source Code Management, Callbacks Monitoring, Heatmap Visualization

Work Experience

- Software Engineer Intern | Outcome Logix | Pittsburgh, PA** **June 2022 - August 2022**
 - Spearheaded the revitalization of the company portal using Java Media Frameworks, achieving KPI-driven increases in automation, productivity, and system flexibility; enhanced video data ingestion and streaming capabilities.
 - Pioneered the implementation of advanced machine learning and deep learning techniques, specifically leveraging Convolutional Neural Networks (CNN) and TensorFlow Library, to transform the landscape of video data classification, including plagiarism detection.
 - Surmounted challenging manual tasks through automated video data analysis and dataset preprocessing, employing Java and machine learning algorithms to significantly enhance data quality and analytical capabilities.
 - Engaged in the collaborative design and Agile development of a comprehensive software testing framework, elevating the existing system’s performance by 25%; contributed to QA (Quality Assurance) and software reliability.
 - Achieved exceptional and quantifiable outcomes in video analytics by deploying cutting-edge machine learning models, optimizing video frame analysis for improved operational efficiencies.
- Full Stack Developer | Infosys Ltd | Hyderabad, India** **August 2020 - January 2022**
 - Engineered a customer-centric web portal leveraging React.js and Python, resulting in a 42% uptick in user engagement and marked improvements in website performance; exercised full-stack development capabilities in Python, Django REST Framework, and SQL.
 - Developed data-rich, interactive dashboards utilizing React and Django REST Framework, facilitating real-time analytics and decision-making.
 - Fortified web application security by implementing robust User Authentication, Authorization Encryption, and secure RESTful API endpoints, ensuring the stringent protection of sensitive user data.
 - Achieved key KPIs of a 15% team productivity increase and a 90% project success rate through the disciplined implementation of Agile methodologies, leading to consistent, on-time project deliveries.
 - Orchestrated a comprehensive testing framework that elevated code coverage by 40% and slashed critical software defects by 60%, using Python and Jenkins for CI/CD.
 - Streamlined and automated CI/CD processes using Docker and Jenkins, ensuring seamless builds and deployments while establishing a consistent development and testing environment.
 - Navigated complex challenges in backend-frontend integration and deployment automation while optimizing component performance and secure data communication, employing Python, React.js, SQL, MySQL, and PostgreSQL.
- Backend Developer | Infosys Ltd | Hyderabad, India** **February 2017 - July 2020**
 - Engineered and deployed Python modules to extract and load asset data from MySQL databases, delivering a KPI-centric 50% reduction in data processing time and catalyzing effective inter-team collaboration.
 - Boosted backend efficiency through Python and Django REST Framework, managing various application-level tasks.
 - Achieved a 40% improvement in MySQL query performance via meticulous optimization with Django REST Framework.
 - Strengthened code reliability by establishing a multi-layered testing framework, including unit, acceptance, and integration tests.
 - Integrated Git and RESTful APIs into the development workflow, fortifying code management and API operations.
 - Streamlined CI/CD pipelines through administering critical support for production tools, libraries, and global configurations.

Projects

- MovieVerse** **January 2023 - May 2023**
 - Engineered a secure, MERN Stack-based MovieVerse platform with RESTful API, Axios, and JSON Web Tokens, focusing on Real-Time Data and User Authentication.
 - Delivered user-centric features, including specialized Search Capabilities for movies, people, and TV shows, as well as dynamic review and rating functionalities. Utilized Frontend Development expertise in React.js to create a Responsive and Intuitive User Interface, achieving elevated User Engagement KPIs.
 - Achieved Scalability and Performance Optimization by deploying the Single-Page Application on Heroku. Prioritized Web Application Security and Data Integrity, contributing to high User Adoption Rates and enhanced Data Quality.
- Calorie Tracker**
 - Led Full Stack Development of a Calorie Tracker app using Django, optimizing CRUD and Data Processing algorithms while enhancing UX/UI and implementing robust Authentication and Authorization.
 - Utilized Real-Time Data Analysis for personalized health features, calculating dietary intake against BMI and automating exercise recommendations, thereby boosting User Engagement and Decision-making KPIs.
 - Deployed the app on AWS EC2 for Scalability and Reliability, applying Web Application Security and Data Privacy best practices to achieve high User Adoption and Data Quality.
- Face Emotion Detection**
 - Developed a robust Face Emotion Detection platform by preprocessing and training a Convolutional Neural Network (CNN) Sequential Model on 1.3M records, optimizing Data Accuracy and Loss Metrics through Callbacks Monitoring.
 - Deployed a global-access Flask Web App on Heroku, featuring User-Friendly Image Uploads for Facial Expression Predictions and HeatMap Visualization of Confusion Matrix, elevating User Engagement and Decision-making KPIs.