Laya P
804-388-8565
srilayaponangi43@gmail.com
www.linkedin.com/in/layap

Summary:

Passionate Computer Science student with 3 years of hands-on full-stack web development experience through internships and academic projects, skilled in React.js, Node.js, Express.js, and RESTful APIs.

- Developed user-centric web applications with a focus on front-end development, database management, and AI integration.
- Delivered optimized, scalable, and responsive solutions for enhanced user experiences.
- Collaborated effectively with cross-functional teams to achieve project goals.
- Seeking an internship to apply skills and gain industry experience.
- Implemented code improvements that boosted application performance by 30%.
- Experienced in utilizing cloud technologies like Azure for user and group access controls.

Skills:

Programming Languages: C, C++, Java, Python, JavaScript, TypeScript
Web Development: React.js, Node.js, Express.js, RESTful APIs
Frameworks: Angular, Spring Boot, Bootstrap
Databases: MySQL, MongoDB.
Cloud Services: Azure (user and group access controls)
Tools & Technologies: Git, GitHub, Maven, Jira
Additional Skills: Data Structures, Algorithms, Operating Systems

Work Experience:

Web developer intern Feb 2024 – May 2024
Dhanu Global Enterprises - Sherman way, CA

- Developed a Resume Builder Application using React.js, Node.js, and the Python Gemini API to automate document parsing, keyword analysis, and resume formatting, resulting in a streamlined user experience and reduced manual effort by 40%.
- Implemented a Secure Employee and HR Login System with multi-factor authentication and role-based access controls using Express.js and React.js.
- Created Interactive Dashboards with React.js and D3.js, allowing HR personnel and managers to visualize employee performance, track KPIs, and monitor project status in real-time.
- Built Dynamic Forms and Wizards for filling, editing, and auto-completing personal details using React.js and Redux, enhancing the form handling speed and reducing errors by 25%.
- Designed and Integrated Training Modules using Node.js and MongoDB, including certification tracking, peer reviews, and feedback functionalities, improving the training completion rate by 30%.
- Developed a Document Management System with real-time version control, document upload/download capabilities, and activity logs using React.js and MySQL, ensuring data integrity and security.
- Engineered Project Management Tools for task creation, client assignment, and project tracking, optimizing the project workflow and reducing task assignment time by 20%.
- Leveraged RESTful APIs for communication between front-end and back-end services, handling high-traffic scenarios and ensuring seamless data flow between HR modules and external services.

Undergraduate Research Assistant July 2023 – Present
California State University Northridge

- **Developed AI Chatbot Interfaces:** Utilized JavaScript, HTML, and CSS to create Qualtrics-compatible chatbots that simulate human interactions, providing randomized positive and negative feedback for survey participants.
- **Survey Design & Implementation:** Designed and built surveys on Qualtrics, integrating AI chatbots to automate feedback collection and enhance user experience.
- **Data Management & Analysis:** Stored and analyzed survey data using Qualtrics tools, ensuring accurate interpretation of participant responses.
- **User Experience Enhancement:** Contributed to improving user experience by brainstorming design concepts, developing color schemes, and refining experimental components.
- **Research Focus:** Assisted in projects examining perceived discrimination between AI and human sources, with a focus on algorithmic preference aversion among marginalized groups.
- **Project Coordination:** Managed tasks for multiple surveys, including Technology and Education in Cultural Context and Perceived AI Discrimination Project, ensuring timely completion of updates and enhancements.

Web developer May 2021 - May 2023

Recruiters Training Hub

- Developed Interactive Web Applications using React.js and Bootstrap, creating responsive and personalized web solutions for IT consultancies, increasing client satisfaction by 40%.
- Led Front-End Development to design dynamic and engaging user experiences, incorporating modular and reusable react components for high maintainability and scalability.
- Optimized Website Performance by reducing page load times through code refactoring and efficient state management, improving the overall user experience by 30%.
- Managed Digital Marketing Strategies by handling the company's Instagram and website, utilizing SEO best practices to drive a 50% increase in website traffic and user engagement.

Senior Projects

August 2024 – December 2024

California State University, Northridge

Course: Machine Learning

Instructor: Dr. Rashida Hasan

- **Developed Advanced KNN Algorithms:** Implemented and optimized K-Nearest Neighbors (KNN) classifiers to predict diseases such as chronic heart disease, kidney disease, diabetes, and breast cancer using diverse datasets.
- **Dataset Management:** Managed and preprocessed multiple datasets, including D1heart.csv, D2heartoutcomes.csv, D3diabetes.csv, D4Heart_Disease_Prediction.csv, D5kidney_disease.csv, D6kidney_disease.csv, D7diabetes.csv, and D8Breast_cancer_data.csv.
- **Custom Distance Metrics:** Integrated the Hassanat distance metric into the KNN framework to evaluate its effectiveness against traditional metrics like Euclidean and Minkowski distances.
- **Feature Scaling & Dimensionality Reduction:** Applied Min-Max scaling and Neighborhood Components Analysis (NCA) to enhance model performance and reduce dimensionality.
- **Cross-Validation & Performance Evaluation:** Utilized 10-fold cross-validation to assess model accuracy, precision, recall, and F1-score, identifying optimal k-values for each distance metric and dataset.
- **Performance Insights:** Achieved significant accuracy improvements with NCA and Hassanat distance metrics, surpassing baseline results reported in related research.
- **Technical Tools:** Python, Pandas, NumPy, Scikit-learn, Jupyter Notebook
- **Collaboration & Presentation:** Worked collaboratively with team members to develop and present project findings to Dr. Rashida Hasan, demonstrating strong teamwork and communication skills.

Project: Gimmr (formerly Text_Styler)

September 2024 – December 2024

California State University, Northridge

Course: COMP 582: Software Requirements

Instructor: Professor Virginia Mushkatblat

- **Developed Text Paraphrasing Application:** Created Gimmr, an application that allows users to paraphrase text in the style of a specified author using the ChatGPT AI API.
- **Feature Implementation:** Enabled users to input text, specify an author's full name, and receive paraphrased output that mimics the author's writing style. Included functionalities for saving and editing previous texts.
- **Quiz Generator Development:** Designed and implemented a quiz generator that utilizes the IDF algorithm and ChatGPT API to generate quizzes from PDFs or specified topics. Incorporated NLP techniques to filter and extract relevant keywords.
- **Full-Stack Development:** Utilized Vite and React for frontend development, Node.js/Express for backend middleware, and Python for backend processing, ensuring seamless integration and functionality.
- **Technical Tools:** Worked with React.js, Vite, Node.js, Express, Python, ChatGPT API, Natural Language Processing (NLP), and Inverse Document Frequency (IDF) algorithms.
- **Collaboration & Presentation:** Collaborated with team members to define software requirements, develop features, and present the final application to Professor Mushkatblat, demonstrating strong teamwork and communication skills.

Technical Skills: React.js, Vite, Node.js, Express, Python, ChatGPT API, NLP, IDF Algorithm, Git, Agile Methodologies

Senior Project: MataMaps – Club Management Application

September 2024 – December 2024

California State University, Northridge

Course: COMP 490: Senior Project

Professor: Vanessa Klotzman

- **Collaborative Development:** Worked as part of a five-member team to design and develop MataMaps, a comprehensive club management application aimed at enhancing student engagement and event coordination on campus.
- **Full-Stack Development:** Utilized React.js for frontend development and Node.js/Express for backend middleware to create a seamless, responsive user interface.
- **Database Management:** Designed and implemented the application's database using MySQL, ensuring efficient data storage and retrieval.
- **User Experience (UX) Design:** Developed intuitive UI mockups and wireframes, enhancing usability and accessibility across multiple platforms, including mobile devices.
- **Feature Implementation:** Integrated core functionalities such as account management, feed/announcement viewing, navigation tools, and club membership management.
- **Security & Performance Optimization:** Implemented JWT for secure user authentication and employed caching techniques to optimize application performance.
- **Deployment & Hosting:** Managed the deployment of the application on AWS, ensuring scalability and reliability.
- **Documentation & Presentation:** Created comprehensive project documentation, including site maps, storyboards, and sequence diagrams, and presented the final deliverable to Professor Klotzman.

Technical Skills: React.js, Node.js, Express, MySQL, AWS, JWT, UI/UX Design, Git, Agile Methodologies

Project: Davinjerlay – Full-Stack Hotel Booking Application

September 2024 – December 2024

California State University, Northridge

Course: COMP 380: Software Development

Instructor: Dr. Abhishek Verma

- **Full-Stack Development:** Engineered a comprehensive hotel booking web application using React for frontend development and Node.js with Express for backend services, ensuring seamless user interactions and real-time booking capabilities.
- **Database Management:** Designed and implemented a robust MySQL database to efficiently handle user data, room availability, bookings, and transactional information, ensuring data integrity and quick retrieval.
- **Automated Communication:** Integrated a Java-based component to automate the sending of booking confirmation emails, enhancing customer communication and reducing manual effort.
- **Data-Driven Pricing Strategy:** Utilized Python to analyze historical booking data and competitor advertisements, enabling dynamic adjustment of room prices and achieving a 20% increase in revenue.
- **Automated Advertisement Generation:** Developed automated systems for generating advertisements based on pricing analysis, minimizing manual intervention and boosting advertisement effectiveness.
- **Backend Architecture:** Architected a scalable backend capable of handling high concurrency, ensuring transactional integrity for room availability, user authentication, and booking processes.
- **Technical Tools:** React, Node.js, Express, MySQL, Java, Python, Git, AWS (if applicable)
- **Collaboration & Presentation:** Worked collaboratively with team members to develop and present the final application to Dr. Abhishek Verma, demonstrating strong teamwork and communication skills.

Technical Skills: React.js, Node.js, Express, MySQL, Java, Python, API Integration, Data Analysis, Git, Agile Methodologies

Interpersonal Skills

- Skilled in managing databases, particularly when it comes to working with a wide range of human face datasets.
- Proficient in creating websites with AI resemblance to enhance user experience.
- Experienced in creating dynamic and adaptable web solutions for various academic and industry purposes.
- Extensive experience working closely with research team, specifically in the field of psychology.
- Extensive experience in front-end development, resulting in the creation of highly efficient and dynamic web functionalities.
- Possess exceptional time management skills and meticulous attention to detail.
- Able to multitask effectively and work calmly under pressure.
- Excellent verbal and written communication skills with strong attention to detail Willing to take initiative on tasks with minimal supervision.
- Capable of prioritizing tasks effectively in a demanding environment.

Education:

California State University Northridge   present-May 2025
Bachelor of Computer Science Engineering   CSUN GPA 3.6

GitHub Profile:
https://github.com/slay-a