AYUSH TRIPATHI
Software Developer

Location: CA | Phone: (213) 551-8802 | Email: ayusht@usc.edu | LinkedIn: https://www.linkedin.com/in/ayushtripathi09/
| GitHub: https://github.com/ayush0904

SUMMARY

Software Developer with over 4 years of experience in delivering effective code solutions. Proficient in a diverse array of programming languages and frameworks, with hands-on experience in designing, developing, and deploying enterprise-grade applications. Skilled in cloud technologies, testing strategies, and data analytics, with a proven track record of optimizing systems and enhancing performance. A proactive team player committed to ongoing learning and staying updated on emerging trends. Dedicated to using technical skills to deliver top-notch solutions that align with business goals.

TECHNICAL SKILLS

Languages and Web Technologies: Python, Java, JavaScript, SQL, HTML/HTML5, CSS3/CSS (Tailwind CSS, Less, Bootstrap)
Frameworks and Databases: Django, Flask, Fast API, React JS, Node JS, Express JS, MySQL, PostgreSQL, Redis, MongoDB
Methodologies: SDLC, Agile (SCRUM), Waterfall
Cloud: AWS (EC2, S3, Lambda, ECS, ECR, CloudFront, CloudWatch, CloudFormation), Azure, Google Cloud Platform
Testing: Unit Testing (Jest, pytest), AB Testing, Performance Testing, Test-Driven Development (TDD)
Tools: Git, GitHub, Jenkins, Docker, Kubernetes, Tableau, CircleCI, Zoho, Salesforce
Libraries & ML: Pandas, NumPy, Matplotlib, Scikit-learn, SciPy, Plotly, Seaborn, Machine Learning, Deep Learning, Natural Language Processing, Data Analytics, Data Visualization

EDUCATION

University of Southern California   **Aug 2021-May 2023**
Master of Science in Computer Science (Major in Artificial Intelligence), Los Angeles, CA
UP Technical University   **Jul 2013-May 2017**
Bachelor of Technology in Computer Science, Uttar Pradesh, India

PROFESSIONAL EXPERIENCE

Software Developer, Together We Rise – Foster Love, Brea, CA (Remote)   **Jul 2023 – Current**
- Led the design and development of 3+ enterprise-level microservice applications with Django, JS, React, PostgreSQL, AWS, Redis, and Docker.
- Achieved 25% cost reduction by migrating on-premises servers to AWS EC2 instances, utilizing AWS ECS, Docker, and Load Balancer.
- Implemented AWS Serverless Image Handler pipeline, resulting in 25% improvement in page load speed.
- Created Abandoned Cart logic via Python and Zoho CRM to track users visiting checkout but not completing transactions. Achieved 5% conversion rate through email reminders using SendGrid.
- Leading the development of an ETL Pipeline to migrate the existing dashboard, aiming for a 10% performance enhancement through streamlined data processing.

Software Developer Intern, One Community Global, Los Angeles, CA   **Jan 2023-May 2023**
- Architected and helped build an ERP System using Node.js, React JS, and MongoDB. This allowed us to complement our current system with participation tracking, infrastructure data analysis, and global collaboration.
- Orchestrated automated test suites with Jest and GitHub Actions, reducing project bugs by 30%.
- Optimized the CI/CD pipeline using CircleCI, enhancing deployment processes by 20%.

Software Developer Intern, Iteris, Santa Ana, CA   **May 2022-Dec 2022**
- Architected a scalable RTSP server using Node.js and AWS, capable of managing over 100 concurrent video streams to facilitate seamless ingestion of video content.
- Led the design of a multimedia platform with Node.js and React JS. The KPIs of the platform were uploading and streaming videos, creating and transcoding video snippets, and managing the servers.
- Boosted web application performance and accessibility by 12% via optimized caching and asset compression techniques.

Research Fellow, University of Southern California, Los Angeles, CA   **Jan 2022-Aug 2022**
- Worked on creating an Administrative Records dataset using the Probabilistic Model (Expected Maximization Algorithm) using Python. Successfully matched 80% of regions (440/548) with an FDR rate of less than 5%.

- Extracted and preprocessed various datasets from different data sources using Beautiful Soup and Pandas.
- Worked with high-performance computers and parallelization through Apache Spark and Scrum jobs.
- Build a corpus of tweets related to climate change using Topic Modelling via LDA and Topic Bert and achieved a coherence score of 0.68 on 1.6M tweets.
- Worked extensively on preprocessing the tweets extracted using the Tweepy Search API and annotated these tweets using a Semi Supervised learning approach.
- Facilitated the team write and execute reports using Tableau.

Software Developer, Noun Design Innovations, New Delhi, India   **July 2020 – July 2021**
- Developed 10+ responsive web pages using HTML5, CSS3, and JavaScript, increasing user engagement by 20%.
- Implemented A/B and multivariate test plans, resulting in a 10% uplift in conversion rates for marketing campaigns.
- Designed a multi-schema architecture in PostgreSQL to ensure data isolation and security in a multi-tenant environment.
- Established an error handling and notification system using Slack API, ensuring prompt issue identification and resolution.
- Implemented URL redirect system utilizing Python and PostgreSQL, resulting in a 15% increase in click-through rates.

Data Analyst, Indian Influential Networks, New Delhi, India   **Feb 2020 – June 2020**
- Designed a dashboard using Python and JavaScript to present marketing data, leading to a 30% reduction in decision-making time and improving data accessibility for cross-functional teams.
- Conducted data analytics on geospatial datasets, leading to a 5% improvement in targeted marketing strategies.

Software Developer, DigiOne Technology Pvt Ltd, Gurugram, India   **Jan 2019-Jan 2020**
- Developed Node.js and React JS-based inventory management platform, cutting perishable food waste by 40% via accurate sales projections.
- Integrated JSON Web Token (JWT) authentication and OAuth2.0 authorization mechanisms into Django APIs, ensuring a secure and seamless user authentication process.
- Utilized Market Basket Analysis (APRIORI) algorithm in Python to identify product associations.
- Created an analytical portal to analyze transactions to understand user behaviors.

Software Developer, Xceedance Technology Pvt Ltd, Gurugram, India   **Jan 2017-Dec 2018**
- Designed and implemented enterprise insurance customer portal for USA's largest insurance company using Java, JavaScript, HTML and CSS.
- Set up and maintained CI/CD pipelines, leading to 30% faster and reliable releases. Created complete technical documents.
- Implemented MySQL replication and failover mechanisms, reducing downtime by 25%.
- Orchestrated a real-time integration between Salesforce and SAP via REST APIs, reducing processing overhead by 30%.
- Led team in writing unit tests before code implementation, resulting in a 30% decrease in post-release defects.
- Collaborated with cross-functional teams to define API specifications, improving overall system interoperability by 20%.

RELATIVE PROJECTS

- **Real Estate Marketplace:**
  Developed a secure and scalable real estate marketplace using the MERN stack with advanced authentication protocols and an intuitive UI. Leveraged Redux Toolkit for streamlined state management and deployed the application on the 'render' platform. The project exhibits expertise in full-stack development, database design, and deployment.

- **Food Ordering App:**
  Designed and developed a user-centric food ordering app using Next.js, GraphQL, Tailwind CSS, and MongoDB for real-time order management. Also included a Blog Section via GraphCMS, encapsulated with Docker, and deployed on AWS Lightsail. The project shows expertise in front-end development, database management, and deployment.