Prashant Iyer

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PROFESSIONAL EXPERIENCE

Michaels Stores, Intern, Irving, Texas

Jun 2024 - Aug 2024

- Implemented 15+ security patches, firewall rules and IAM/PAM role management in GCP, ensuring compliance, access control and improved accessibility for diverse user roles.
- Automated CI/CD pipelines on Jenkins, deploying centralized applications on GKE for improved scalability and reliability.
- Established 5 JIRA workflows to streamline task management and enhance work visibility.

Technologies and Tools: GCP, GKE, Jenkins, Grafana, Git, Jira, Agile Methodology.

Enquero – a Genpact company, Data Engineer, Bangalore, India

Sep 2020 - Jul 2023

- Developed reusable frameworks to automate data processing, validation, and visualization, reducing manual effort by 40%.
- Designed and implemented 10+ data pipelines using Python, Pyspark, SQL, and AWS, integrating PowerBI for reporting to improve data accessibility and reliability.
- Applied advanced ML/DL techniques for preprocessing and training 10+ production-grade models, optimizing system performance and generating insights that drove a 50% increase in process efficiency.
- Streamlined AWS data workflows, reducing storage and compute costs by 20% through improved ETL strategies and allocations.
- Collaborated with cross-functional teams and clients to gather requirements and deliver solutions aligned with business objectives. Technologies and Tools: Python, PySpark, Pytest, SQL, AWS, PowerBI, BDP, SAP Hana, Git, JIRA, Agile Methodology.

Enquero – a Genpact company, Intern, Bangalore, India

Jan 2020 - Jun 2020

- Administered MySQL databases and business logic, improving query performance by 25%.
- Developed in-house Skill Management Tool, improving employee skill tracking, and boosting resource allocation efficiency by 30%. Technologies and Tools: JavaScript, Node.js, SQL, Git, JIRA, Agile Methodology.

TECHNICAL SKILLS

Programming Languages: Python, SQL, PySpark, C, C++, JavaScript, Node.js, R, Java, HTML, CSS, Shell Scripting.

Databases and Data Handling: MySQL, MongoDB, PostgreSQL, Oracle DB, SAP HANA.

Tools and Platforms: Power BI, Databricks, Jenkins, Kubernetes, GitHub, Bitbucket, Eclipse, VS Code, Jupyter, EMR, Hadoop, JIRA.

Cloud Platforms: AWS, GCP.

ACADEMIC PROJECTS

Covid-19 Impact Analysis: [R, Git]

 Created 30+ visualizations and reports with 4 key recommendations through end-to-end analysis of COVID-19 data using EDA, clustering, and classification, tailored for Texas county administrators to reduce analysis time by 30%.

Architectural Design and Comparative Analysis: [JavaScript, Node.js, React.js, MySQL, Django, HTML, CSS, Git]

• Engineered food ordering applications using Layered and Client-Server architectures with a focus on responsive design and usability; conducted analysis on 5 key metrics, demonstrating a 25% efficiency improvement with the Client-Server model.

Designing AI Agents in Custom Environments: [Python, Git]

• Designed and optimized intelligent agents for 3 diverse environments using heuristic search and reinforcement learning, achieving an 80% success rate through algorithm tuning and environment-specific adaptations.

Multimodal AI for Clinical Outcome Prediction: [Python, PySpark, Pytorch, SQL, HPC, Git]

- Developed fairness-aware models combining structured data with unstructured clinical notes using BioClinicalBERT and LLaMA.
- Achieved 85% AUROC in ICU mortality and readmission prediction by leveraging Generative AI to summarize clinical notes and improve accessibility.

EDUCATION

Southern Methodist University, Dallas, TexasMaster of Science, Computer Science

Amrita Vishwa Vidyapeetham, Kerala, India

Bachelor of Technology in Computer Science and Engineering

CGPA: 3.93/4.0Aug 2023 – May 2025 **CGPA: 8.48/10**Jun 2016 – Aug 2020

TEACHING EXPERIENCE

• Teaching Assistant for Database Management and Python courses at SMU, assisting faculty in designing and grading assignments, and mentoring over 100 students to enhance their technical understanding.

PUBLICATIONS

• ICSCAN 2020 (IEEE): Smart Resource Handling Module for Parking. [link]