PRAMATH PARASHAR

Tucson, Arizona, USA

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EDUCATION

Kent State University, OHIO, USA
Master of Science — Data Science. **GPA:** 3.74 / 4.0 Graduating on May 09 2024 **May 2024**

Malla Reddy Engineering College, TELANGANA, INDIA
Bachelor of Technology — Computer Science and Engineering. **GPA:** 8.34 / 10.0 **Jun 2022**

TECHNICAL SKILLS

Programming Languages: Python, C Programming, C++, Java, JavaScript, R Programming, MATLAB and Simulink.
Database Management: MySQL, Oracle SQL, PostgreSQL, SQL Server, NoSQL, Data Warehousing.
Data Analysis and Visualization Tools: Excel dashboard, Alteryx, QlikView, Tableau, Power BI.
Big Data Technologies: MapReduce, Hadoop, PySpark.
Cloud Technologies: Google Cloud Platform (GCP), Amazon Web Services (AWS), Microsoft Azure, IBM Watson.
Internet of Things: Raspberry Pi, Arduino Programming.
Software Development: Spring framework, JDBC, Test-first/Test Driven Development, Familiarize with Software development methodologies like Agile, CI/CD.
Data Governance: UI/UX, Data Quality, Data Processing, Security Controls, Root Cause Analysis, Data Modeling, Data Transformation, Data Mapping, Data Collection, Data Architecture.
Other Skills: TCP/IP, Jenkins, SAP, ADAS, Microsoft Excel, Power Apps, Canvas Apps, BDD

WORK EXPERIENCE

Data Science Specialist **Sept 2024 – Present**
BHP Minerals Service Company - Legacy Assets (Client via AirSwift), Tucson, AZ, USA

- Engineered end-to-end data pipelines and automated dashboards using **Python, SQL, and Power BI**, transforming complex environmental and closure datasets into actionable insights for strategic decision-making.
- Designed and deployed **Excel-to-SharePoint synchronization automation** using **Power Automate** and the **Microsoft Graph API**, enabling seamless file transfer, metadata updates, and version control across thousands of records daily.
- Developed predictive analytics and statistical models (regression, clustering, XGBoost, neural networks) to identify environmental risk drivers and optimize closure cost forecasting.
- Created interactive **Power BI dashboards** for water quality compliance and legacy asset performance, integrating **EQuIS**, **Snowflake**, and **SharePoint** data to visualize exceedances and KPIs.
- Automated generation of regulatory and annual reporting deliverables (Word and Excel outputs) through Python scripting, reducing manual processing time by over **80%** and saving approximately **$50,000 annually** in external consultant costs.
- Partnered with multi-disciplinary teams (geoscience, environmental, and finance) to translate business questions into data-driven insights aligned with the **BHP Operating System (BOS)** framework.

University Student Web Developer Part time **Feb 2024 - May 2024**
Kent State University, Kent, OH, USA Verify

- Orchestrated a strategic website enhancement plan for the Africana Studies department, which enhanced user retention by 30% and led to a 15% increase in student inquiries, driven by the implementation of SMS alerts.
- Implemented targeted social media ad campaigns that yielded a 50% increase in event attendance; collaborated with design team to create compelling visual content that engaged 10,000+ online followers.

Data Analyst Internship **Feb 2024 - Apr 2024**
Datics INC, Charlotte, NC, USA

- Conducted in-depth data analysis to uncover patterns and trends, resulting in a data-driven decision-making approach that boosted sales by 22% and optimized marketing strategies.
- Developed SQL procedures and customized queries to import data from SQL Server into visualization tools, resulting in a 5% increase in data-driven insights for decision-making purposes.
- Engineered a data pipeline using SQL, NumPy, and Pandas, improving data quality and speeding up Tableau reporting by 10%. Worked with analysts to boost forecasting and operational efficiency.

Technical Support Associate **Nov 2021 - Apr 2022**
Pioneer Instruments, Hyderabad, Telangana, INDIA Verify

- Orchestrated project planning and execution for 10+ initiatives, ensuring strict adherence to timelines and deliverables, resulting increase in on-time project completion rates across the portfolio by a 16%.
- Monitored project budgets, tracked expenses, and prepared financial reports to ensure cost-effectiveness and compliance with financial guidelines.
- Administered project schedules and milestones to streamline project execution, leading to a 25% decrease in project timeline overruns and enhancing project delivery efficiency.
- Collaborated with cross-functional teams to address project-related issues and ensure project success.

Machine Learning with python Student Intern **Mar 2021 - Apr 2021**
Verzeo, Bengaluru, Karnataka, INDIA Verify

- Revamped project management processes by implementing Agile methodologies, resulting in a 40% increase in project efficiency and on-time delivery; elevated programming skills through hands-on experience in Python machine learning techniques.
- Drafted project implementation strategies and testing plans to ensure superior functionality and reliability; conducted in-depth user acceptance testing resulting in a 30% reduction in post-launch defects and a 20% increase in overall system performance.
- Prepared and presented a comprehensive report showcasing project achievements, while tracking weekly progress to ensure timely milestone delivery.

Web Application Development Student Intern **May 2019 - Jun 2019**
VVV Infotech, Hyderabad, Telangana, INDIA Verify

- Developed a web application for a student dashboard at Malla Reddy Engineering College with visualizations to provide faculty members with insights into students' test performances.
- Led the implementation of a roll number registration feature enabling students to monitor attendance and academic performance; increased student involvement by 35% and academic success rates by 20%.
- Collaborated with a team to ensure successful implementation and functionality of the web application.

LICENSES AND CERTIFICATIONS

PL-600: Microsoft Power Platform Solution Expert Verify
PL-200: Microsoft Power Platform Consultant Verify
PL-300: Microsoft Power BI Data Analyst Verify
PL-900: Microsoft Power Platform Fundamentals Verify
DP-900: Microsoft Azure Data Fundamentals Verify
AZ-900: Microsoft Azure Fundamentals Verify
MTA: Introduction to Python Programming Verify
Google Data Analytics Professional Certificate Verify
Cisco: Introduction to Packet Tracer Verify
Cisco: Introduction to Cybersecurity Verify

PROJECTS

Annual Reporting Automation Suite (PyQt + Python) **Sept 2025**

Developed a **PyQt-based desktop application** that automates the generation of BHP's environmental annual report visuals. By selecting a site and reporting year, the tool dynamically produces all required visuals, tables, and metrics using data sourced from **Snowflake** and **EQuIS**. The system integrates multiple Python automation scripts to streamline content creation, reducing manual compilation time by over 80% and saving approximately **$50,000 annually** in external consultant costs.

Water Quality Monitoring Dashboard (Power BI) **Jun 2025**

Developed an enterprise-level **Power BI dashboard** covering all BHP **U.S. and Canadian sites** to visualize chemical concentration trends (e.g., Al, Sb, As) using data from **EQuIS**, **Snowflake**, and **SharePoint**. Integrated direct links to **As-Built drawings and site-specific well documentation**, allowing engineers and environmental teams to access monitoring history, exceedance data, and compliance reports through a single interactive interface. The tool supports regulatory reporting, closure key risk indicators and long-term environmental monitoring.

SharePoint Sync Automation Flow **Mar 2025**

Built a Power Automate flow to synchronize Excel metadata and PDF files with SharePoint libraries using Microsoft Graph API. Incorporated duplicate detection, metadata version control, and daily scheduling at 7 AM MST, eliminating manual uploads across 4,000+ documents.

CTD Processor App (PyQt) **Oct 2024**

Created a Python PyQt desktop application for transforming, calibrating, and validating CTD (Conductivity–Temperature–Depth) Excel profiles. Enabled dynamic parameter input, quality control automation, and consistent data output for field teams.

Water Potability Prediction App GitHub **Jun 2025**

This project predicts whether water is potable (safe for drinking) based on various physicochemical properties. It includes a machine learning pipeline built using XGBoost, calibrated for better probability estimates, and a modern Streamlit web app for user interaction.

Analysis of Car Sales Data in Tableau GitHub **Jan 2024**

Incorporated Tableau to analyze car sales data, identify key trends and popular models, resulting in strategic decisions that increased revenue by 12% and improved competitiveness through optimized sales strategies.

Analysis of Netflix Dataset GitHub **Oct 2023**

Analyzed of Netflix content, revealing trends that boosted user engagement. This, coupled with leading a team to improve user experience, resulted in a 30% decrease in customer churn and a 40% increase in satisfaction.

Data Analysis of Walmart Sales GitHub **Aug 2023**

Leveraged data techniques on Kaggle's Walmart dataset, pinpointed top branches and products, handled NULL values, and introduced new features, resulting in a 15% sales boost and project success.

PUBLICATIONS

- **Adaptive Reinforcement Frameworks for Multi-Agent Learning Systems Paper DOI Link** **Sept 2025**
- **Self-Evolving AI Workflows: A Formalized Feedback Model for Autonomous Optimization Paper DOI Link** **Sept 2025**
- **Enhancing Association Rule Mining with the CGRG Algorithm: A Cluster-Based Approach Paper DOI Link** **Sept 2025**
- **Enhanced Visual Statistical Inference: Comparative Evaluation with Linear Model Testing Paper DOI Link** **Aug 2025**
- **Comparative Analysis of Distributed Storage Systems: Architectural Design, Performance, and Cost Trade-offs in Modern Cloud Environments Paper DOI Link** **Jul 2025**
- **Hybrid Cloud Analytics for Environmental Data: Integrating EQuIS, SQL Server, Python, and Snowflake for Scalable Compliance Monitoring Paper DOI Link** **Jul 2025**
- **Optimizing Market Making with MDPs Paper DOI Link** **Jul 2025**
- **Design and Implementation of an Automatic Plant Watering Device with 2D Visual Gesture Recognition Paper DOI Link** **Jul 2025**
- **Water Potability Prediction App: A Cost-Free, Streamlit-Based Machine Learning System Using Public Environmental Data Paper DOI Link** **Jun 2025**
- **Value-Based Resource Allocation for Edge Computing: A Market Balancing Approach Paper Link** **Mar 2021 – Apr 2021**

MEDIA & PRESS COVERAGE

How a new hire tackled 5 giant problems in a global mining company — Featured in WIONEWS (OCT 2025). **Read Article**

Using Python Desktop App to Change Excel Workflows: Hours Reduced to Seconds — Featured in Metapress (Sept 2025). **Read Article**

Low-Code Vs Traditional Development: Power Apps Fleet Management Case Study — Featured in Free Press Journal (Aug 2025). **Read Article**

Building User-Friendly Tech Solutions: Bridging the Gap Between Developers and Users — Featured in Mid-Day / Buzzfeed (Aug 2025). **Read Article**

IoT Meets Agriculture: Smart Plant Watering and the Future of Sustainable Farming — Featured in OneIndia (Jul 2025). **Read Article**

Tech Alchemist: Pramath Parashar is leading enterprise automation — Featured in European Tech (June 2025). **Read Article**