APARNA YALAMANCHI

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EXPERIENCE

Tesla, Inc. — Fremont, CA
Materials Program Manager, NPI — *March 2025 – Present*

- Achieved **30% reduction in air-freight costs** by designing and executing a staggered multi-modal logistics strategy for China-origin parts; analyzed lane-level lead-time variability to optimize mode mix.
- Averted potential line-down and **saved $23K in air-freight costs** by qualifying and releasing a previous revision MS Parcel shelf; partnered with design, quality, and launch teams to validate compatibility.
- Built a data-driven chrome allocation system linking Tier-2 capacity to variant-level demand; **automated weekly allocations with Power Query**, improving coverage by 40% and reducing expedites.
- Designed and implemented a lineside material tracking process for low-volume battery pack builds, **improving count accuracy by 60%** and eliminating small-quantity air expedites.
- Coordinated BOM revisions and supplier readiness for evolving NPI parts; aligned design timelines and trial priorities across Fremont, GFTX, and GFBB.
- Architected a multi-agent NPI Control Tower prototype using **Python, Pandas, and RAG-lite logic** to autonomously reconcile unstructured supplier signals with build plans.

Lasso Loop Recycling — San Mateo, CA
Sustainability Analyst Intern — *June 2024 – August 2024*

- Built a lifecycle emissions model using EPA WARM and GHG Inventory datasets; demonstrated a **28–35% reduction in lifecycle emissions** per ton using closed-loop recycling.

Material Depot (YC W22) — Bengaluru, India
Procurement Specialist — *April 2023 – July 2023*

- Developed KPI reporting frameworks (OTD, quality, responsiveness), **improving supplier compliance by 30%** and reducing material shortages by 20%.
- Designed a multi-pickup/drop routing model with 3PL partners; **increased truck utilization by 25%** and reduced order turnaround time by 20%.

Shapoorji Pallonji Group — Hyderabad, India
Project Engineer – Materials Planning & Procurement — *January 2021 – December 2022*

- Ensured **CTB (Clear to Build) visibility for a $70M project** by managing SAP-based MRP data and synchronizing procurement and site schedules, improving on-time completion by 60%.
- Reduced lead times by 15% through proactive vendor management and improved ownership transfer protocols for materials and equipment.
- Designed trackability systems for non-inventory assets, **improving traceability by 20%** and reducing supply chain disruptions by 12%.
- Created dashboards using **advanced Excel (Pivot Tables, V-Lookups)** to track KPIs for inventory management, reducing surplus inventory by 15%.

EDUCATION

Duke University — Durham, NC
Master of Engineering Management — *August 2023 – December 2024*

- Built a Sustainability Guide GPT chatbot and developed a Python-based carbon price forecasting model using historical EU ETS data and time-series analysis.

Vellore Institute of Technology — Vellore, India
Bachelor of Technology in Civil Engineering — *July 2016 – July 2020*

SKILLS

Data Analytics & BI: SQL, Advanced Excel (Scenario Planning, Sensitivity Analysis, Predictive Modeling, Pivot Tables, VLookUps), Power BI, Tableau, Python
Financial & Cost Analysis: Budget Planning, Should-Cost Modeling, Inventory Cost Optimization, SAP ERP, Lean & Six Sigma