**Avinash Gorantla, MSEE, PMP sai.g@atvsllc.com**

**Sr. Technical Strategic Leader/Program Management 832-905-1099**

Analytical and growth-focused professional with vast project management experience, ensuring projects are completed within budget, quality, scope, and schedule. Skilled in coordinating interconnected programs, managing deadlines, and mitigating risks. Proven expertise in leading electrification projects, drafting scopes, supervising engineering designs, and developing a global fleet deployment roadmap. Accomplished strategic leader with a proven track record, adept at decision-making, critical thinking, and contract negotiation to drive business growth. Stellar in team leadership, collaborating with partners and technology leadership, developing construction design packages, enhancing operational efficiency, and employing cost-effective techniques. A detail-oriented individual capable of organizing risk assessments, implementing continuous improvement, and enforcing ongoing maintenance.

**Qualifications Summary**

* Stellar track record of leading and supervising teams to achieve designated goals and targets.
* Well-versed in collaborating with business/functional partners and technology leadership in defining functionality.
* Skilled at developing complete construction design (CD) packages for large-scale facilities, buildings, and infrastructure.
* Proficient at developing strategies focused on increasing team performance and enhancing operational efficiency.
* Detail-oriented individual with an interest in monitoring ongoing operations and employing cost-effective techniques.
* Capable of utilizing management skills to organize risk assessments and employ continuous improvement methods.
* Creative professional, enforcing ongoing maintenance, scheduling repairs, and providing future results.
* Proven success in monitoring team performance and reporting on metrics, motivating team members, encouraging creativity, and suggesting ways to improve productivity and revenue.

**Area of Expertise**

* Global Technical Program Management
* Industries & EV Facilities Construction
* Data Center Infrastructre
* Sustainability & Energy Management
* Strategic Research & Analysis
* Risk Analysis & Mitigation
* Team Leadership & Development
* Engineering Design and Manufacturing
* Electric Vehicle Infrastructure
* Resource Planning
* Organisation Building

**Professional Experience**

**Amazon Data Services, Seattle, WA. Oct 2021 – Present.**

**Senior Technical Program Manager – Global, Data Center Engineering, Infrastructure Global Initiatives**

Comprehend and capture the scope, establish project schedules, and develop resource and budget estimations while collaborating with senior leadership. Engage in completing the release of all new/retrofit data center products, such as requirement analysis with the project management team, release planning, design, development, and testing with the engineering team. Define fast-paced, realistic schedules within the challenging environment through close collaboration with engineering, product, and design teams.

* Spearheaded the global implementation of Electric Vehicle Charging Infrastructure at Amazon Data Centers, resulting in successful installations across 274 locations in the AMER, EMEA, and APAC regions. This initiative facilitated the transition of employees to electric vehicles and reduced CO2 emissions by 5,000 metric tons annually, aligning with Amazon's sustainability goals.
* Led a cross-functional team in developing and executing a comprehensive strategy, which included engaging with utilities, suppliers, and vendors. Through strategic partnerships and efficient procurement processes, achieved cost savings of $1.2 million, reduced procurement time by 20%, and ensured compliance with local regulations and safety standards.
* Managed the end-to-end program, overseeing the design, installation, and commissioning of EV charging stations. Leveraging market research and data analytics, optimized the charging experience, increasing utilization rates by 25% and ensuring a 99% product reliability rate, resulting in a seamless integration of EV charging infrastructure with existing systems and processes.
* Led global MaxCool program execution, deploying solutions at 186 retrofit sites and new builds, expertly managing a $260M budget, and accelerating delivery time by 20% through innovative implementation procedures.
* Devised a reporting dashboard for 172+ projects, driving data-driven resource allocation and securing over $900K in cost savings by strategically prioritizing inflight projects.
* Skillfully orchestrated parallel execution of WMW Network Refresh and WMW Retrofits across 114 legacy sites, enhancing resiliency and availability while fostering strong collaboration among diverse stakeholders.
* Spearheaded AWS expansion in the IAD region by devising a Transmission and Generation Strategy, diversifying power sources, and creating three new AZs in central VA, resulting in a secured line of sight to 1.5GW by 2032 and reducing combined shortfalls by 8,638MW by 2030.
* Fostered strategic partnerships with Dominion, PJM, and internal stakeholders to analyze and optimize transmission infrastructure, effectively addressing power constraints and mitigating future risks to ensure AWS's continued growth and
* Championed a comprehensive remediation plan for 32 Centralized Industrial Water Building designs, ensuring minimum availability and redundancy requirements, eliminating single points of failure, and achieving an estimated 5-year NPV of $401K per 12-pod OPTDC builds with an average of 5.5 TKE of MAX IT per building.
* Streamlined design standards across 11 campuses, optimizing electrical power redundancy, pumping systems, and HVAC systems, while driving stakeholder engagement through a two-part approach to CIWB program management, resulting in consistent and cost-effective design execution.
* Fostered a culture of continuous improvement, driving a 15% increase in energy efficiency and promoting environmental responsibility across the organization while forging robust relationships with internal and external partners in site selection, engineering, design, construction, and operations.

**Rivian, Normal IL. April 2020 – Sep 2021**

**Sr EE/Technical Program Management - (CAPEX) Design & Construction**

Designed and developed electrical systems to gain high specifications, focusing on cost, safety, reliability, quality, and system sustainability. Demonstrated innovative design layouts and led entire Electrical Infrastructure design for almost 3.5MSqft. Utilize software to develop, test, and improve manufacturing processes and product designs and employ design standards efficiently. Implement and maintain policies and procedures for designing, testing, installing, and maintaining electronic equipment. Introduce and implement new electrical power techniques to develop and improve deliverables. Deliver support and knowledge to program teams in updating equipment standards and reducing capital

expenditures and operating expenses associated with overall operations.

* Spearheaded the design and development of high-specification electrical systems as a Senior Technical Lead, emphasizing cost, safety, reliability, quality, and system sustainability while overseeing the entire Electrical Infrastructure design for a 3.5M sqft facility.
* Spearheaded the nationwide deployment of 3,000+ EV charging stations, optimizing placement through data-driven analysis, resulting in a 15% increase in accessibility and 10% cost savings through strategic partnerships with local utilities.
* Streamlined project management using agile methodologies, reducing deployment time by 20% and maintaining a 95% on-time delivery rate while overseeing a $50M+ budget and implementing sustainability initiatives, integrating renewable energy sources in 25% of deployments.
* Delivered expert guidance and support to program teams, contributing to updating equipment standards and achieving substantial reductions in capital expenditures and operating expenses across all operations.
* As a Senior EE directed a diverse team of consultants to accomplish project objectives, successfully managing and completing major capital equipment projects, generating over $2M in cost savings for the company.
* Championed the improvement of layout drawings, schedules, specifications, datasheets, and technical evaluations by ensuring compliance with ANSI/IEEE industry standards, fortifying the company's competitive position in the marketplace.
* Supervised engineering consultants, implementing technical solutions that adhered to industry regulations and expertly managing 50%, 90%, and construction document (CD) packages, ensuring high quality and timeliness.
* Orchestrated the design, procurement, and construction of 3.5M square feet of manufacturing space for greenfield and brownfield capital projects worth $10M, effectively meeting deadlines and ensuring the successful completion of projects.
* Conducted in-depth feasibility analysis of alternative locations for new substations, realizing $500K in project savings and expertly upgrading 15KV and 480V substations to a more fault-tolerant architecture, impacting over $15M in systems.
* Diligently reviewed and confirmed design drawings for compliance with NFPA, NEC, UL, and other local codes and regulations, maintaining a safe and compliant work environment while keeping upper management informed of ongoing processes.
* Streamlined site selection process, identifying and securing 3+ optimal locations, accelerating new plant developments by 15%.
* Skillfully negotiated contracts with 50+ vendors and suppliers, achieving an average of 10% cost reduction in procurement expenses.
* Collaborated with local and regional authorities to obtain 100% of necessary permits, preventing costly delays and ensuring full regulatory compliance.
* Effectively managed cross-functional teams of 30+ professionals, achieving a 95% on-time project completion rate.
* Conducted risk assessments and devised mitigation strategies, reducing potential project delays by 25% and cost overruns by 20%.

**Benteler Group, Michigan. Aug 2016 – April 2020**

**Controls and Robotics - Engineering Lead**

Installed software and hardware by designing, developing, and supervising all electrical control systems, equipment, and machinery. Programmed diverse types of PLCs (Siemens, RS Logix) and relays to incorporate optimization of robotic applications and reduced downtime. Scheduled and programmed ABB robots (IRC5) for high-speed production processes, servo systems/drives, and other control devices to perform specified tasks using teach pendants, keyboards, and robotic controllers.

* Spearheaded a team of 8 engineers, successfully delivering 41 high-value OEM projects, including FORD F150 & FORD Bronco pilot lines, ranging from $600K to $10M, by optimizing electrical control systems, robotics, and automated material handling technologies.
* Expertly designed engineering schematics and analyzed motor drive systems while developing a real-time machine database interaction with Cogent Datahub, driving innovation, efficiency, and data-driven decision-making in the manufacturing process.
* Led the programming of diverse PLCs and relays while implementing cutting-edge technologies such as vision systems, enhancing production efficiency and system reliability, and reducing downtime across all projects, ultimately optimizing high-speed production processes and increasing overall operational performance.
* Designed and implemented control systems and algorithms for robotic applications, such as assembly, welding, and material handling, achieving a 20% improvement in cycle times, precise motion control, and reduced error rates.
* Orchestrated the seamless integration of robotic systems with production lines, collaborating with cross-functional teams, including mechanical engineers, electrical engineers, and production managers, resulting in a 40% reduction in downtime and a 15% increase in overall equipment effectiveness (OEE).
* Developed and executed a comprehensive controls and robotics engineering strategy, aligning with the company's automation, quality improvement, and production optimization objectives. Successfully implemented standardized processes, resulting in a 30% reduction in implementation time and improved quality consistency.
* Conducted feasibility studies and cost-benefit analyses to evaluate the implementation of new robotic technologies and control systems, resulting in the successful adoption of innovative solutions that led to a 15% reduction in production costs and a 25% increase in productivity.

**R&E Automated Systems**

**Electrical Controls Engineer Mar 2016 – Aug 2016**

Provided On-Site Installation of PAC Meters (3100, 3200, 4100, and 4200) under technical management and team lead guidance. Installed WINPM.Net software while communicating with the IT group and gaining information on computer name, IP address, and domain name.

* Installation and Setup of Communicating Parameters for Siemens Power Monitoring Systems (i.e.), ION Power Meters (ACCESS 9510 & 9610) on the job site as per the customer requirements.
* Oversaw the successful completion of multiple automation projects, defining project scope, setting milestones, allocating resources, and coordinating with internal and external stakeholders. Delivered projects on time and within budget, achieving a 95% project completion rate and receiving recognition for outstanding project management.
* Spearheaded continuous improvement initiatives, leveraging process data analysis to identify opportunities for enhancing automation efficiency and product quality. Implemented advanced control techniques and machine learning algorithms, resulting in a 30% reduction in energy consumption and a 15% improvement in first-pass yield.
* Collaborated with suppliers and vendors to evaluate and select automation components, negotiate contracts, and manage vendor relationships. Effective negotiations and streamlined supplier management processes achieved a 15% reduction in procurement costs.
* Installation of Computer & Network Components. Setting up Communication & Network Protocols on the job site as per the customer (TCP/IP, Industrial Ethernet, IP routers, Modbus, Profibus, and Profinet) to communicate with WINPM.Net Siemens.
* Integrated with the Software by Designing and Programming VIP logic in the Management Console, which calculates PUE (Power Usage Effectiveness). Logging is used to determine the Data Center's energy efficiency.
* Maintained up-to-date knowledge of emerging trends and advancements in controls and robotics engineering, actively participating in professional networks and leading internal knowledge-sharing initiatives. Implemented innovative solutions, resulting in several patent filings and recognition as a subject matter expert within the industry.

**BK Threshers (P). ltd April 2012 - July 2014**

**Asst. Electrical Engineer (Project Management)**

Designed, developed, tested, and supervised electrical equipment manufacturing, such as electric motors, relays, power supplies, transformers, and circuit breakers. Operated computer systems to develop electrical schematics and layouts for control and power system protection equipment. Performed calculations for detecting faults across machinery and ensured complete testing of power transformers. Understood electrical safety requirements to investigate voltage drops & load banks, cable sizing, and conduit sizing.

* Received the title of “Global Level Engineer” for leading several projects from start to finish with a value of around $5M.
* Led the installation and commissioning of the entire electrical infrastructure for the company's facilities, including power distribution systems, lighting, and control systems, ensuring compliance with safety standards and local regulations. Achieved 100% uptime and reliability in electrical operations, resulting in uninterrupted production and minimal downtime.
* Created AC & DC schematics and wiring diagrams for a 33KV gas-insulated substation.
* Played a vital role in setting up highly automated process lines and collaborating with cross-functional teams, including mechanical engineers, automation specialists, and production managers. Implemented state-of-the-art electrical controls, resulting in a 30% improvement in production efficiency and a 25% reduction in overall production costs.
* Implemented predictive maintenance programs for electrical systems, leveraging condition monitoring techniques and data analysis to identify and proactively address potential issues. Reduced unplanned equipment downtime by 20% and achieved 95% equipment availability.
* Exchanged data between controllers and devices in an automation setting while installing commissioned compact starters (3RA6) and Soft starters (3RW44) using AS-Interface (IP/OP based on SIEMENS ET 200S – IO module).

**Education**

* **Master’s Degree, Electrical & Electronics Engineering,** Texas A&M University, Kingsville, TX
* **Bachelor of Science, Electrical & Electronics Engineering,** Jawaharlal Nehru Technological University, Kakinada

**Certifications**

* Project Management Professional (PMP)®
* National Electric Code 2020 NFPA 70
* Power Distribution Management SCADA
* Fundamentals of Engineering
* Fundamentals of Power System Protection for Engineer
* IRC5 Robot Programming Material Handling
* ABB Robot Studio
* ABB IRC5 Programming with SPOT welding.

**Key Tools**

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| * SmartSheets | * Microsoft Project | * Jira |
| * Confluence | * Agile Tools | * Slack |
| * Outlook 365 | * Share Point | * WorkDocs |
| * Microsoft Teams | * Microsoft Excel | * Tableau |
| * PowerBI | * Lucid Chart | * Draw.io |
| * AutoCAD | * Bluebeam |  |