

WORK EXPERIENCE

Industrial Engineer | Wolfspeed | *Semiconductor Manufacturing* | October 2023 - Present

- Investigated tool usage statistics and product flows by querying and analyzing manufacturing execution system log data to accurately model factory capacity and output, updating as necessary to capture technical process changes and continuous improvement projects.
- Led working sessions with cross-functional teams to aggregate & document institutional knowledge to drive alignment on manufacturing capacity outlook.
- Presented monthly capacity reports to leadership covering equipment availability, utilization, bottlenecks/areas of concern, and relevant projects effects & risks.
- Revised sales & operation plans for manufacturing feasibility, providing recommendations based on model outputs and associated risks.
- Collaborated with process engineers to quantify cost/benefit of technical changes, and guide project plan implementation.

Industrial Engineer | CRB Group | *Pharmaceutical/Life Science Manufacturing Consulting* | May 2022 - September 2023

- Analyzed historical receiving, usage, and shipping data combined with future demand growth projections to right-size receiving dock, warehouse, cold room, and shipping dock pallet storage space.
- Performed a high-level observation & interview-based study to locate areas of improvement within current process, then made recommendations on future studies to analyze root causes and possible solutions.
- Utilized expansion designs including floorplans, layouts, and process schedules to construct a traffic simulation to inform feasibility of design plans, optimal routes within specified constraints, and areas prone to congestion.
- Created a capacity model to determine the feasibility of a central weigh & dispense station based on anticipated demand, quantified benefits/time savings, then ranked possible locations based on adjacencies, cost and disruption based on current operations.
- Leveraged facility and equipment layout, historical production data and future projections to run discrete-event simulations. Performed sensitivity analysis on stochastic simulation output data to right-size equipment before capital expenditure and to quantify investment return/breakeven points & risk.

EDUCATION

Industrial Engineering B.S. | North Carolina State University

- Business Administration Minor

PROFESSIONAL INVOLVEMENT

Founder & Local Champion | CRB Young Professionals Employee Resource Group | August 2022 - September 2023

- Lead inception of the Young Professionals group by writing official governing by-laws and procedures.
- Sought and recruited executive sponsors to endorse the group to company leadership.
- Directed educational and social activities within office and outside of work, and lead other offices to stand up their own groups and events.

SKILLS

Data Analysis | Visio | Excel | SQL | VBA | Power Query | Power BI | Discrete Event Simulation | C# | Python | Lean Six Sigma | Project Management | CAD | CAM | Logistics | Process Improvement | Supply Chain Analysis | Entrepreneurial Thinking |