CHRIS DSILVA

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EDUCATION

Rutgers University, New Brunswick, New Jersey, (GPA: 3.833)

Sep 2022 - May 2024

- Master of Science in Industrial and Systems Engineering
- Relevant Coursework: Data Analytics for Engineering Systems, Supply Chain Engineering, Quality Management, Simulation of Production Systems, Project Management (RBS), Risk Analysis and Mitigation, Production Analysis

Princeton University, Princeton, New Jersey

Sep 2023 - Dec 2023

ORF 535 Financial Risk and Wealth Management

University of Mumbai, Mumbai, India

Jul 2016 - May 2020

• Bachelor of Engineering in Mechanical Engineering

WORK EXPERIENCE

Hikma Pharmaceuticals (Compounding 503B) – Graduate Engineering Intern

May 2023 - Aug 2023

- Oversaw calibration and validation of over 50 types of equipment in compliance with internal standards and FDA/DEA guidelines, significantly enhancing operational reliability and adherence to quality standards. Developed and implemented a Blue Mountain software-based calibration forecasting system, boosting scheduling efficiency by 5% and minimizing equipment downtime, thereby preventing potential regulatory issues
- Executed Installation, Operational, and Performance Qualification (IOPQ) for new equipment, improving long-term reliability by 10% and ensuring compliance with regulatory standards in collaboration with QA and manufacturing teams

Accutech Power Solutions – Production Planning (Mumbai)

Jan 2022 - Jul 2022

- Streamlined repair processes for telecom tower rectifier modules and redesigned production line layouts, employing lean manufacturing and line balancing techniques and 2D/3D CAD software. Achieved a 10% reduction in repair time and increased overall production efficiency.
- Optimized sales strategy and operational efficiency by targeting specific regions and zones in quarterly analysis, leading to a 3% increase in sales performance in Q2 2022.

Jude Electronic Products - Production Engineer (Mumbai)

Nov 2020 - Dec 2021

• Led a 6-member production team and implemented just-in-time (JIT) inventory strategies along with demand forecasting, significantly reducing stockouts and overstocks, which streamlined inventory management and improved overall operational efficiency

KEY PROJECTS

Princeton University

Financial Analysis and Strategy Consulting Report

Sept 2023 - Dec 2023

Created a comprehensive financial analysis for a \$1.5M condo purchase, utilizing Monte-Carlo simulation to project a \$500k down payment growth. Evaluated various 10-year investment strategies, including a 70/30 SPY/TLT allocation, considering a 25% capital gains tax rate. Assessed feasibility over 5, 7, and 10-year periods and analyzed impacts of fluctuating salary growth rates and investment returns. Developed dynamic investment recommendations adaptable to evolving financial goals and market conditions, emphasizing a client-centric approach

Rutgers University

Efficient 3D Grid Pathfinding with RL Optimization

Sept 2023 – Dec 2023

• Implemented a Reinforcement Learning (RL) algorithm to guide agents through a complex 3D grid environment efficiently, optimizing pathfinding while avoiding obstacles. Achieved optimal agent behavior through RL training, emphasizing efficient algorithm design. Generated animated visualizations of the agent's optimal paths for comprehensive analysis

Solar Canopy Project Proposal (Eng. Economics)

Sep 2023 – Dec 2023

• Developed a comprehensive engineering project proposal for a solar canopy project, including engineering analysis, financial budget proposal, probabilistic risk analysis, sensitivity analysis, and strategic recommendations

Premier League Prediction Project

Sep 2022 -Dec 2022

• Developed a Premier League standings prediction project using regression models and conducted data visualization

PROFESSIONAL AFFILIATIONS

 Member of the Institute for Operations Research and the Management Sciences (INFORMS) Chapter at Rutgers New Brunswick

Jan 2023 – Present

Member, Rutgers Alpha Pi Mu Honors Club for Industrial and Systems Engineering (2024) - Recognized for academic merit and dedication to the field
 Dec 2023 - Present

Project Manager (Business Team) at the Rutgers Solar Car Team

Dec 2023 - Present

SKILLS

- Software: Flexsim, MS Office (Excel, PowerPoint), AutoCAD, SolidWorks, Ansys (Mechanical APDL), Tableau, Arena, Power BI,
- Programming: Python, R, MATLAB