

Gourav Jhanwar

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EDUCATION

Purdue University, West Lafayette 05/2019

Master of Science in Industrial engineering (GPA 3.77/4.00)
Among top 1% students offered full research assistantship

Sardar Patel College of Engineering (SPCE), Mumbai, India 05/2015

Bachelor of Technology in Mechanical Engineering with *Distinction* (CPI 8.38/10.00)

PROFESSIONAL EXPERIENCE

Research Assistant, Visual Analytics for Command, Control and Interoperability Environments, Purdue 08/2018- Present

- Working on seed funding project for developing and testing a first-of-its-kind visual analytics software tool that integrates in situ and remotely sensed data at multiple scales of resolution
- Develop Bayesian decision-making and deep learning models in Python, to enable real time multi-criteria decision making
- Built web app using python Django framework for growers in California which would help them save 8% of irrigation water

Quality Software Developer Intern, Oerlikon Fairfield, Lafayette, IN 05/2018 – 08/2018

- Dramatically reduced production scrap and waste by implementing SPC software on the shop floor to analyse real-time data
- Proposed predictive maintenance of gear grinding machine using application of IOT and machine learning algorithm

Project Engineer, Kalpataru Power Transmission Limited, Mumbai, India 07/2015 – 06/2017

- Managed project budget of \$51 M+ with workforce team of 20+ subcontractors and performed budget allocation
- Leveraged SAP to Integrate various business modules by creating BOMs, Sales Order, PR & POs and Shipment tracking
- Documented the Annual Operating plan (AOP) for Transmission line projects for cost and revenue analysis.
- Controlled inventory along with production forecast and organized shipment schedules

RESEARCH AND PROJECT EXPERIENCE

Portfolio Optimization with Linear and Fixed Transaction Costs 08/2018 – 12/2018

- Solved the non-convex problem of optimal portfolio selection with transaction costs using heuristic algorithm in MATLAB
- It would help shareholder to identify best stocks to invest and its holding period among hundred S&P 500 companies

Devanagari (alphabets of Hindi language) classification using Convolutional Neural Network (CNN) 08/2018 – 12/2018

- Recognized Hindi language characters using computer vision technology with Keras

Multi-Level Monte Carlo (MLMC) Simulation in American Option Pricing 01/2018 – 05/2018

- Investigated MLMC in pricing path-dependent options and the computation of option price sensitivities
- Simulated the S&P500 data with the Black-Scholes model for option pricing and compare with MLMC simulation

Predicting the severity of forest fires at a Montesinho Park forest using Machine Learning 02/2018 – 05/2018

- Predicted the probability of fires and to figure out special weather conditions resulting in increased burned areas using SAS

Determining optimum production schedule using simplex algorithm 08/2017 – 12/2017

- Optimized the production schedule of a plant containing the various set of constraints on inventory, demand and facility

SKILLS

- Programming Languages (in order of comfort): Python, SAS, R, SQL, MATLAB, JAVA, JavaScript, PHP, C, C++
- Technologies and Software: Hadoop, Spark, Tableau, AWS, CATIA, MongoDB, Auto-cad, Pro-e, ARENA, MINITAB
- Libraries and Frameworks: Django, Pandas, Scikit-learn, Pymc, Keras, Pytorch, TensorFlow, Pyspark
- Project Management: Microsoft project (MSP), Advanced Excel User, MS Access, SAP, MERP

GRADUATE COURSEWORK

- Information Engineering (IE 590) ➤ Uncertainty Quantification & ML (MA 598) ➤ Big data Optimization (IE 590)
- Dynamic Programming & RL (IE 633) ➤ Industrial Application of Statistics (IE 533) ➤ Applied Regression (STAT 512)
- Visual Analytics (ECE 695) ➤ Stochastic Optimization & ML (STAT 598) ➤ Statistical Quality Control (STAT 513)

HONORS & AWARDS

Awards In the field of Mathematics:

- Certificate for distinguished merit in Pradnya Prabodhini mathematics exam
- Certificate for distinguished merit in the national level exam Institute for Promotion of Mathematics (IPM)