Yash Gokhale

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Carnegie Mellon University (CMU) EDUCATION

Pittsburgh, PA

Dec 2020 Master of Science in Chemical Engineering, 3.88/4.0

Relevant Coursework: Data Science for Technology, Machine Learning, Energy Storage Systems,

Process Modeling, Energy Policy & Economics, Energy Generation and Supply

Institute of Chemical Technology Mumbai, India

Bachelor in Chemical Engineering, 8.23/10.0 Jun 2019

Relevant Coursework: Energy Engineering, Environmental Engineering, Chemical Project Economics,

Process Development, Process Control, Industrial Management

SKILLS Technical: Proficient: Python, R, SQL; Intermediate: Git, MATLAB; Basic: HTML, C

Software: Tableau, Apache Spark, Power Bi, GAMS, Hadoop, Minitab, ArcGIS

Databases: PostgreSQL, MySQL, MSSQL

Packages: Python: pandas, scikit-learn, tensorflow, pyomo; R: ggplot2, tidyr, dplyr, modelr

PROJECTS Big Data Analysis of radar data for climate modeling Pittsburgh, PA

> Dec 2019-Present Master's Project | The Gordon Group, CMU

Devised a Python framework from scratch for spatial-temporal clustering and data aggregation using grid-box methodology for required resolution

- Developing a time-series model of the clustered radar data to forecast the cloud droplet concentration as an independent parameter
- Assessing the operability of multiple classification algorithms such as Random Forest, KNN and SVMs to segregate hydrometeor types based on atmospheric features

Integrating EV batteries into microgrid to replace peaker plants

Jun 2020-Present

- Developing a techno-economic feasibility study plan to design stationary energy storage systems with second use EV batteries to address peak demand
- Modeling requirement of second-use EV batteries using data fitting and life-cycle analysis
- Devising an optimization model to predict battery degradation to mimic power plant behavior

Global Optimization of Gas Lifting Operations

Jan 2020-May 2020

May 2019-Aug 2019

- Maximized oil production of 200 oil wells with 98% average accuracy using MILP solver in GAMS
- Optimized gas requirement curves using piecewise linear functions with supply constraints

EXPERIENCE

Rosefield Energy Tech

Strategy Intern

Mumbai, India

- Analyzed global trends in electric vehicle investments through cost-benefit analysis
- Developed statistical models to estimate the EV demand using forecasting techniques
- Engineered supply chain network models for renewable energy markets

Jacobs Engineering Group Inc.

Mumbai, India

Consultancy Intern

May 2018-Aug 2018

- Collaborated with the consultancy team to analyze the P&IDs for process accuracy and led the procurement of query list for optimum process equipment design
- Developed a Prototype Simulator to estimate cooling water make-up requirement in VBA Macros to lower water loss by 2%

CO-**CURRICULARS**

Data Analysis Lead, CMU Covid-19 Environmental Impact Team 2020

Led the data analysis to create an interface to visualize real-time carbon emissions in USA

Summer Research Assistant, Heinz College of Information Systems Jun 2020-Aug 2020

Analyzed the effect of user's browsing history on advertisements displayed in future browsing