# Abhinav Prakash

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## Education

Texas A&M University [Fall '16 - present]
Ph.D., Industrial Engineering (GPA: 3.93), Advisor: Prof. Yu Ding

Visvesvarya National Institute of Technology, Nagpur, India [May '12]
B. Tech., Mechanical Engineeing (GPA: 3.4)

## Research Interests

Statistical modeling, Nonparametric regression, Regression with time series errors, Bayesian inference, High-dimensional hypothesis testing.

## Publications

- **Prakash A.**, Tuo R., & Ding, Y. (2020). The temporal overfitting problem with applications in wind power curve modeling. *arXiv preprint arXiv:2012.01349. (under review).*
- **Prakash A.**, Tuo R., & Ding, Y. (2020). Gaussian process aided function comparison using noisy scattered data. *arXiv preprint arXiv:2003.07899. (under review).*
- **Prakash, A.**, Panchang, V., Ding, Y., & Ntaimo, L. (2020) Sign constrained Bayesian inference for nonstationary models of extreme events, *Journal of Waterway, Port, Coastal, and Ocean Engineering.*
- Ding, Y., Kumar, N., **Prakash, A.**, Kio, A. E., Liu, X., Liu, L., & Li, Q. (2020). A case study of space-time performance comparison of wind turbines on a wind farm. *arXiv preprint arXiv:2005.08652. (under review).*

## Experience

Research Assistant, *Texas A&M University* [May '17 - present]
Worked on developing data science models for wind power curve estimation and comparison using Gaussian processes, time-series analysis, and Bayesian inference.

Executive, *Bharat Petroleum Corporation Limited*, India [Jul '13 - Apr '15]
Managed a network of 86 fuel stations (gas stations) franchise in seven districts; worked on sales and business development, equipment upgrade, and quality control.

Management Trainee, *Bharat Petroleum Corporation Limited*, India [Jul '12 - Jul '13]
Trained on different aspects of fuel retailing business, including operations, sales, franchise management, and business development.

## Software skills

MATLAB, R, C++, Python, Shell, Linux/Unix, Git.

## Developed Software

R package: DSWE *(Data Science for Wind Energy)* - `https://github.com/TAMU-AML/DSWE-Package`.

## Relevant Coursework

Analysis & Prediction, Theory of Inference, Design of Experiments, Advanced Spatial Statistics, Computer Experiments, Learning and Optimization on Networks, Large Scale Stochastic Optimization, Linear Programming, Nonlinear & Dynamic programming.

## Selected Course Projects

- Class competition: wind power prediction challenge (winning team). (Course: Analysis & Prediction).
- Sample average approximation scheme on L-shaped algorithm for solving large scale stochastic optimization using CPLEX callable library in C++. (Course: Large Scale Stochastic Optimization).

## Other Activites

- Vice President (Marketing), INFORMS Student Chapter, TAMU (Jan 2020 to present).
- Presenter, INFORMS Annual Meeting, Nov 2020, Virtual. Topic: Temporal overfitting in wind power curves.
- Presenter, INFORMS Annual Meeting, Oct 2019, Seattle, WA. Topic: Statistical comparison of two wind power curves using Gaussian process regression framework.