

# USMAN GOHAR

usman.gohar@hotmail.com | 217-720-7530 | Ames, IA  
[www.linkedin.com/in/usman-gohar](https://www.linkedin.com/in/usman-gohar) | [www.medium.com/@usman.gohar](https://www.medium.com/@usman.gohar)

## PROFESSIONAL SUMMARY

An experienced Data Scientist with 3+ years of research experience across ML & AI. I have work experience in building and deploying predictive models, data engineering, visualization, and time-series forecasting.

## EDUCATION

Ph.D. Computer Science | **Iowa State University** 2020 - Present  
MSc. Computer Science | **University of Minnesota** 2017 - 2019  
B.E Computer Engineering | **National University of Sciences & Technology** 2017

## SKILLS

**Tech Stack:** Python, R, SQL/NoSQL, Spark, Scikit-learn, Seaborn, TensorFlow, Tableau, Jupyter Notebook  
**Data Skills:** Exploratory Data Analysis, Predictive Analytics, Time Series Analysis, Forecasting, Machine Learning, Data Mining, Advanced Statistics, Statistical Modeling, A/B testing, NLP, Text Analytics

## WORK EXPERIENCE

**Research Assistant** Aug 2020 - Present  
*Iowa State University* Ames, IA

- Leading multiple ML projects to investigate fairness and algorithmic bias in ML systems
- Collaborating with different labs and faculty on interdisciplinary research projects
- Event Detection from Tweets using unsupervised text keyword analysis & clustering (ML | NLP)

**Data Scientist - Intern** May 2021 - Aug 2021  
*Bayer* Creve Coeur, MO

- Investigated the effects of irrigation on row-crop yield prediction
- Collected relevant historical irrigation data, including well levels, river, and aquifers from disparate sources (USDA, USGS) and aggregate for EDA and modeling
- Designed grower-level ML value-proposition model to determine Bayer seeds' competitiveness

**Software Developer - (Data Scientist)** Sep 2019 – Aug 2020  
*Open Access Technology International* Minneapolis, MN

- Led a team of developers to build a framework for energy forecasting for Micro Grid
- Designed and built data pipelines to ingest data from production (SQL, MongoDB), performed data preprocessing, feature engineering, model evaluation, and developed dashboards on Tableau
- Developed end-to-end predictive model to predict energy load forecast based on historical load, weather & exogenous data. Experimented with multiple ML & statistical algorithms to improve predictions
- Automated deployment of models using Jenkins & Ansible to reduce deployment time & error builds (80%)

**Data Scientist - Search Engine Optimization Intern** Jun 2017-Aug 2017  
*Progos Tech* Islamabad, Pakistan

- Interpreted data to develop metrics to analyze shopping trends. Wrote complex SQL queries to extract data from multiple databases, processed in Jupyter notebook, & visualized in Tableau dashboards
- Supported search engine optimization team to improve average monthly website traffic (+4K) and ranking using data-driven decisions. Designed and performed A/B testing on new website features

## FELLOWSHIPS AND OPEN SOURCE

- Technical content contributor for the *Towards Data Science* publication on Medium with over 50K views
- Awarded the Teaching Excellency Award from the Department of Computer Science (2021)
- Recipient of the F. Wendell Miller Scholarship awarded to outstanding graduate student (2020-2023)
- Invited talk at Data Science Minneapolis on my research: Trajectory Outlier Detection (2019)
- Summer Graduate Research Fellow, University of Minnesota (2018)