

# Fatima Perwaiz

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🌐 LinkedIn

🔗 Portfolio

## EXPERIENCE

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### Data Scientist

Jan 2022 – Present

*Purdue University, USA*

- Led an NSF-funded **exploratory quantitative study to compare resource distribution** and instructional strategies in 8 Indiana school districts, measuring their impact on middle-school students' STEM career preferences.
- Designed Qualtrics surveys and data pipelines to manage district-level **data collection for 50K students and 100 educators**.
- Maintained data standardization with **pivot tables and VLookup in Excel** and developed **SQL queries** to transform structured and unstructured data across multiple sources.
- Conducted cluster analysis in R Studio to categorize unsupervised data and engineered **multivariate predictive models** to validate career-influencing factors with a **95% accuracy**.
- Assisted the **Indiana Department of Education** in evaluating their education policies by designing **data visualization dashboards** and **assessment reports** to communicate the findings to technical and non-technical stakeholders.

### Data Analyst Intern

Jun 2023 – Aug 2023

*Instructure, USA*

- Conducted **A/B testing** on upcoming AI-based features within Canvas to facilitate **prototyping** and improve user experience.
- Developed 8 interactive surveys to investigate **Canvas usability challenges** for people of different age groups, collaborating with data scientists, product strategists, and UX designers to lead product modification.
- Achieved an **11% reduction in subscription cancellations** by translating findings into monthly reports with actionable recommendations to assist **stakeholders with decision-making**.

### Business Analyst

Jun 2019 – May 2021

*Qosain Scientific, Pakistan*

- Led product development of SandBox: an experimental kit for high schoolers to set up their own physics experiments.
- **Trained 35 educators** for product usability testing, collaborating with engineers to bring analytical prototypes to production.
- **Collaborated with stakeholders** and the project teams to understand market trends, data requirements, and data governance compliance to inform future **decision-making and business operations**.

## SKILLS

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Statistical Modeling, Machine Learning, Logistic Regression, Inferential Statistics, Gradient Descent, Clustering, ANOVA, Predictive Modeling, Relational Database, Ridge Reg, Data Visualization, Research Plans and Strategy

**Technical:** R Studio, MATLAB, Python (Numpy, Pandas, Scikit learn), C++, SQL, SAS.

**Tools:** MS Office, Spreadsheets, Pivot Table, Power BI, NVIVO, Tableau, Qualtrics.

## EDUCATION

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### Purdue University

West Lafayette, IN

Master of Science (BS), Technology Leadership and Innovation

May 2024

Minor in Statistics

CGPA: 3.78/4

Relevant Courses: Applied Regression Analysis, Quantitative Research Methods, Experimental Design, Intermediate Statistical Methods

### Lahore University of Management Sciences (LUMS)

Lahore, Pakistan

Bachelor of Science (BS), Physics

May 2019

### Google Data Analytics Professional Certification

Coursera