# TULSI SHRIVASTAVA

#### DATA ANALYSIS • BUSINESS INTELLIGENCE • OPTIMIZATION

Using data models & visual storytelling to improve outcomes for underrepresented populations

# **&** 814.792.5033

- Pairfax, VA
- tulshri.github.io/portfolio
- Ø U.S. Citizen

## EDUCATION

# M.S. Data Analytics Engineering

George Mason University • 2022 - 2024 • Graduation: May 2024 • GPA 3.8/4

B.S. Mathematics & Information Systems (with Minor in Marketing)

University of Pittsburgh at Johnstown • 2015 - 2019 • Summa Cum Laude: GPA 3.8/4

### WORK EXPERIENCE

# Graduate Research Assistant • Community Informatics Lab

GMU Department of Information Sciences & Technology • May 2023 - Present

- Lead researcher on state-funded project for Virginia Board for People with Disabilities (VBPD) to understand the fragmentation of disability service information
- Conducting interviews with various disability providers using snowball sampling; including coordinating ASL communication & managing 50+ transcriptions
- Qualitative data coding and analysis of interviews and surveys in Excel and Atlas TI to identify information gaps

# **Business Intelligence Analyst**

Learning Sciences International • 2019 - 2022

- Built and managed 30+ user-facing KPI dashboards embedded in the application environments from proof-of-concept stage to production deployment, which were used to market the strength of the tool and help educators with academic success
- Process Efficiency: Reduced the manual run time of an internal process for a large school district from 8 hours per week to 10 minutes per month
- Wrote SQL queries for large databases (Postgres, Redshift, Snowflake) and employed BI Tools (Power BI, Sisense) to analyze datasets and create actionable reports for internal and external userbase
- Established survey/feedback and user engagement dashboards for use by management, SMEs, product owners, support and sales teams
- Designed data models with engineers and stakeholders to fit reporting requirements
- Served as liaison between software developers, education consultants, and end-users

#### **Systems Analysis Intern**

Problem Solutions (Software) • 2018 - 2019

- Employed UI/UX design, rapid prototyping methods, and requirements elicitation techniques to software solutions for commercial and government clients
- Prepared business documentation product backlogs, proposals, roadmaps, diagrams, POA&Ms
- Assisted in the QA Testing of applications during development

#### PROJECTS

## **Data Analysis**

- Utilizing SAS to Study U.S. Census Data and Highlight Talent Potential of Johnstown, PA
- Educational Attainment Level: Examining Its Influences from an International Lens (R, Python, SQL)
- Predicting Airline Delays via Regression in R using Bureau of Transportation Statistics Data
- Sentiment Analysis of Amazon Book Reviews in **Python**
- Operations Research: Coffee Sales Problem using Linear Programming in Analytic Solver

#### Co-Author

- H.A.T. **QA Model**: Developing a Question-Answering NLP System
- Proposal for Mapping Information Ecology: Understanding the Fragmentation of Disability Service Information

#### SKILLS

# **Reporting & Visualization**

- Power BI (+DAX)
- Tableau
- Sisense
  - KPI Dashboard Creation

# Data Analysis & Operations Research

- SQL, R, SAS
- Math Model Formulation:
  - Gurobi Optimization
  - Python + SQLite Studio
  - o Excel Analytic Solver
- NLP using Python
- Statistical Analysis
- Relational Data Modeling
- Qualitative Data Coding
  - Atlas TI
- Databricks

#### **Agile Development**

- Scrum, Rapid Prototyping
- Wireframes, Mockups
- UI/UX Design, Adobe XD

#### Communication

- Public Speaking
  - Trained Tutor ✓
- · Presentation Design
- · Graphic Design
- Hindi & Urdu

#### VOLUNTEER

# Unity Coalition of the Southern Alleghenies

2017 - Present Co-chair of small town social justice advocacy organization

## **NAACP Johnstown**

2021 - Present Lead graphic designer and event planner with community leaders

# In This Together Cambria

2020 - 2022

Former co-chair of advocacy team that championed community-led solutions to reduce the spread of COVID-19