

Usman Khaliq

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EDUCATION

Stanford University

2018-2020

MS Design Impact

Stanford Data Lab: Taught by Hadley Wickham (Chief Data Scientist at RStudio).

- Developed extensive proficiency in exploratory data analysis techniques using the tidyverse packages in R
- Conducted Network analysis on FiveThirtyEight's dataset of 3 million Russian Troll Tweets to determine how different categories of troll accounts coordinated before major political events.

Ghulam Ishaq Khan Institute of Engineering Science and Technology

2011 - 2015

BSc Computer Engineering

RELEVANT WORK EXPERIENCE

Overjet

June 2020 – Present

Data Scientist

Boston, Massachusetts

- Created data pipelines that sent automated daily emails to clinics highlighting patients needing special procedures
- Reduced the time that it took to validate the data of a new dental clinic for onboarding from 3 days to 2 hours
- Defined product success metrics and created the infrastructure to track them. Increased the ROI for a major dental organization by 33.6X
- Created data visualization dashboards for the clinical team to communicate with clients
- Wrote data munging scripts that automated wrangling of demographic data for company's 510k FDA application
- Wrangled data for 10 years from 10 dental practices with a combined patient population of 200,000 to create patient cohorts of diabetic and non-diabetic patients for a research project with the Harvard School of Dental Medicine

Verily Life Sciences

June 2019 – Sept 2019

User Experience Research Intern

Cambridge, Massachusetts

- Conducted qualitative research on developing an end-to-end product to diagnose and manage sleep apnea

Systems Utilization Research for Stanford Medicine (SURF) Lab

April 2019 – Dec 2019

Research Assistant

Stanford, California

- Developed a clustering algorithm from EHR and patient registry data for patients with ventricular septal defect to implement a target-based care program at the Stanford Children's Hospital
- Built a data visualization application using Shiny R that implemented different variants of the Medicare for All model developed by Schulman & Milstein. Published in Health Management Policy and Innovation Volume 4

Centre for Design Research, Stanford University

January 2019 – March 2019

Ford - Stanford RX Car Project

Research Assistant

- Conducted qualitative assessment to determine whether the characteristics of an in-vehicle assistant impact a passenger's confidence in an autonomous vehicle's capabilities. Paper published in AutomotiveUI 2020.

PUBLICATIONS

- Gabriel M. Knight, Kevin Schulman, Arnold Milstein, Sheridan Rea, Giovanni Malloy, Usman Khaliq, David Scheinker. 2019. **A Transparent, Mathematical Model to Evaluate Proposals for Healthcare Reform**. Health Management Policy and Innovation, Volume 4, Issue 3
- S. Alpers, B., Cornn, K., E. Feitzinger, L., Khaliq, U., Park, S. Y., Beigi, B., ... & Leifer, L. (2020, September). **Capturing Passenger Experience in a Ride-Sharing Autonomous Vehicle: The Role of Digital Assistants in User Interface Design**. In *12th International Conference on Automotive User Interfaces and Interactive Vehicular Applications* (pp. 83-93).

SKILLS

- **Programming Languages:** Python, R(tidyverse), SQL, Javascript
- **Data Visualization Softwares and libraries:** ggplot2, seaborn, Tableau, Retool, Google Data Studio